

**This is a summary of the book Flatland: A Romance of Many Dimensions, by Edwin Abbot Abbot, published in 1884.**

The goal is to summarize everything from the original novel to make it easier for people to understand, if they don't want to read the original novel or the 2024 translation, or would like a quick(er) reminder.

Flatland: A Romance of Many Dimensions, is a political satire as well as an introduction to the concept of different dimensions. The author, Edwin Abbot Abbot, wrote it to criticize the systems of oppression he saw around him in Victorian England: Misogyny, racism, ableism, classism, intersexism, and more.

He wrote his narrator to be a bigot who is very self-centered and proud of his own bigotry, to make fun of actual bigots. Everything the narrator believes in is exaggeratedly and blatantly evil, to showcase the evil of society's bigotry towards women, people of color, disabled people, intersex people, poor people, and more.

## **Section 1: About the Narrator of Flatland**

The Narrator of the original book does not have any confirmed name that we know, because he chose to hide his identity with the fake name of “A Square”, the same way that people will call themselves “J Doe” or “M Smith” when they don’t want to reveal their true identity.

Many fans enjoy calling him “Abbot Square”, affectionately naming him after the author, Edwin Abbot Abbot, or give him other names that start with A, and base their own original characters for the setting's last names on their shape in a similar style. For example, “B Line”, or "K Polygon".

Despite this, the narrator's name is not actually A Square, so you can call him anything you want, and you won’t be wrong. The Sphere who visited him also has no confirmed name, and can again be called anything.

We do not know what kind of family names exist in Flatland, or if they even use them at all.

The only character from the book whose name we know for certain is Pantocyclus, a historical dictator Circle.

Another historical figure is usually called Chromatistes, but even within the story, there is some debate by historians about whether or not that's accurate.

Both Pantocyclus and Chromatistes lived thousands of years before the story takes place, so the only things we know about them is what the Circles decided to tell people afterward. If it makes it easier to think about the scale of time, they can safely be considered as far back in history as Jesus, or even earlier.

The narrator of Flatland has a wife, and they have had at least six children together: 5 Pentagons, and 1 Straight Line.

We do not know any of their names, or their personalities.

We do know that one of the adult Pentagon sons died, presumably along with his wife, leaving behind two orphaned Hexagons, the narrator's grandsons, who now live with the narrator and the rest of his adult children and wife.

They live in a surprisingly rich neighborhood near a large theater. We know that the roof of their house was recently repaired, though we do not know how it was damaged.

We know that the narrator is considered a gentleman, a respected lawyer, with money and social status. We also know he's a bigot, and that he likes the idea of color (which you'll learn more about later), and he enjoys doing math for fun in his free time, including going to conventions for it.

But that's pretty much all we know about him. The original Flatland novel's first half is a general overview of Flatland society, with the second half being the narrator's personal journey to different dimensions. We do not learn much more about him than I have described above.

If you want to write your own version or continuation of the story, you can build on all of the above, or throw it out completely. Just remember to keep the morals of the original story firmly in sight.

## **Section 2: About Flatland, and the people and societies that the Narrator was familiar with**

The people of Flatland are different geometric figures: Circles, Hexagons, Pentagons, Squares, Triangles, Lines, and more.

They have no arms, legs, feet, or hands, but are still able to move about and move things in a way that is not explained to us. Since they have no legs, they can't "sit" or "run" the way we do, but still use these words to mean different levels of activity: staying in one place calmly is called sitting or lying down, moving quickly is called running, and suddenly surging in a direction is called jumping.

People in Flatland don't actually call their world “Flatland” among themselves, that is just a name the Narrator came up with to make what it's like more obvious for the audience. Flatland is a very easy way to make it clear that Flatland is a land that is very flat.

We do not know the names of any countries in Flatland, or what any of them actually refer to their world as.

We do not know how many countries there are, or how big or small they are, or where they are in relation to one another.

We just know that there are multiple countries that are ruled by a council of Circles, which is then ruled by the supreme Chief Circle. None of these Circles are elected, instead they are chosen for their physical form. In these areas of Flatland, wider angles and more sides equals higher social status. And the Circles were the highest ranked of them all.

It might be helpful to think of them as structured similarly to the United States of America, but we don't know for sure, since we aren't given any details.

There are almost certainly countries outside of this arrangement, but none were spoken of. It's extremely likely that it would be illegal for anyone within the Circle-controlled countries to speak of countries where things are done differently.

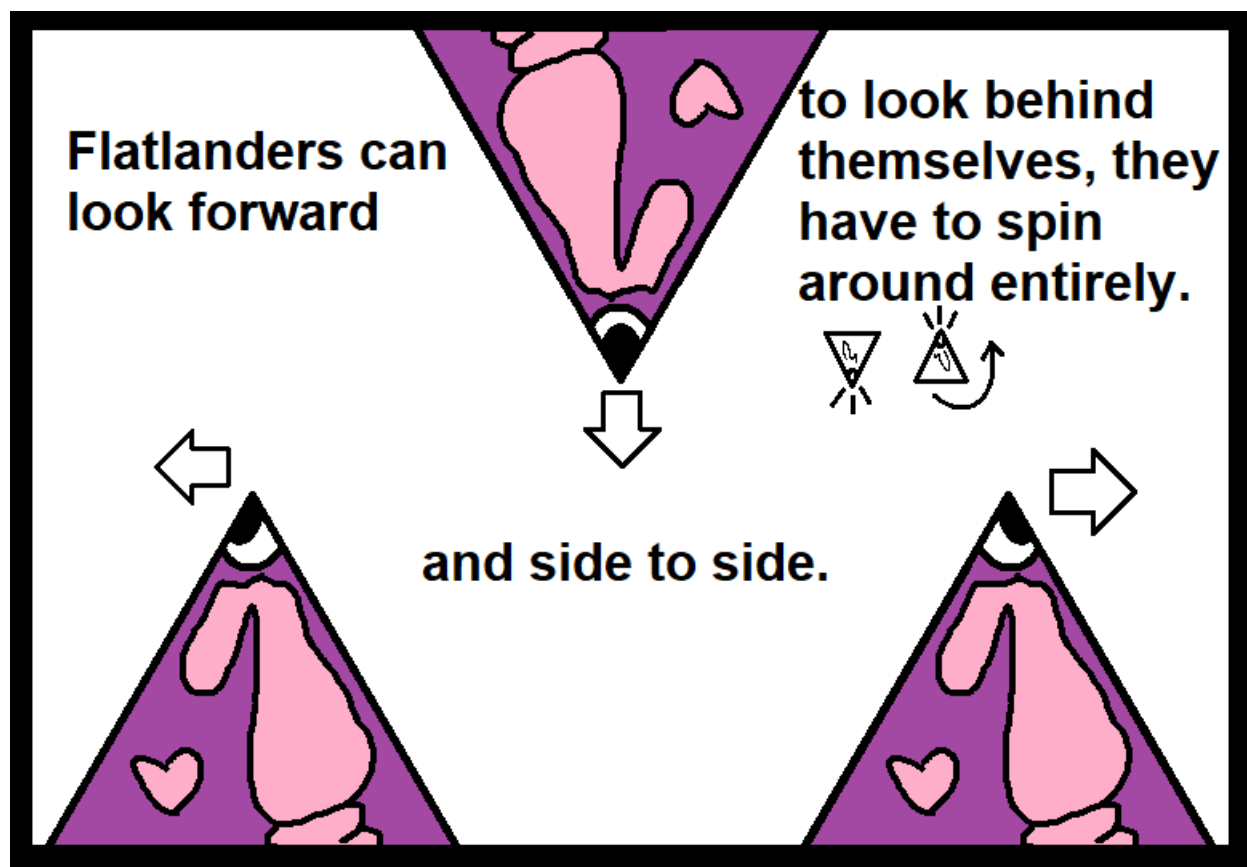
Flatlanders refer to themselves as human beings. Nothing is told to us about any other specific species in Flatland, though the narrator does take the time to assure us that just because he doesn't mention something doesn't mean it doesn't exist. (Just like how most authors don't tell us when the characters go on bathroom breaks, but those are still a thing that exists, that the characters are doing at some point)

We know that vegetables and trees exist in Flatland, but we don't know the details, besides that tree trunks somehow aid in determining North and South.

You should imagine the inhabitants of Flatland as very thin shapes that swim through the top layer of a large ocean. They can't leave this single layer, either by going up or down, and they're not aware of anything outside it. They're not even aware that they're inside a liquid at all, or aware of any movement of this liquid. They cannot look up or down. They have no inherent concept of up or down at all.

They categorize the directions as North, South, East, and West.

They can look forwards, and from side to side. They cannot look up or down as we define them.



[Image description start: A diagram showing a triangle with a purple inside and simple pink blobs for organs, labeled, “Flatlanders can look forward, and side to side. To look behind themselves, they have to spin around entirely.” The Triangle is shown at the bottom of the image and pointing upward, with their eye first looking to the left, then turning to the right, then they are shown at the top of the image looking down and straight ahead. Next to this is a much smaller, black and white diagram showing the triangle turning to face back the way they’d come. Image description end.]

Unlike our compass directions, which are indicated by magnetic north, the Flatland compass is defined by the "Southern pull", an



affect like a magnet or gravity that is noticeable in most parts of Flatland.

The strength of this pull is increased the further South along the flat plane you go, and weakens the further North you travel.

We do not know for sure what causes it, because the narrator did not know, but it could be some sort of magnet, or a dense core of some sort creating a kind of gravity. Whether or not there is a special 2D gravity is up to you to decide.

Moving on from the compass, the houses in Flatland are shaped like pentagons, because it was decided that the angle of a pentagon was the sharpest angle that should be allowed on a building for the sake of public safety, because running into the sharp corner of a more pointed building could be very dangerous.

The pentagonal houses face north so that rain, which always comes from the north on a predictable schedule, does not come in either of the doors, which are on lower sides that are angled inward.

On the western side is a large door for men, on the east a much smaller door for women.

Buildings in Flatland have no windows, because light is always visible no matter where you are or if you are in a building or not.

Unknown to them, light comes from the Third Dimension above them. Scholars used to try to figure out where light came from, until the Circles made it illegal to ask those sorts of questions.

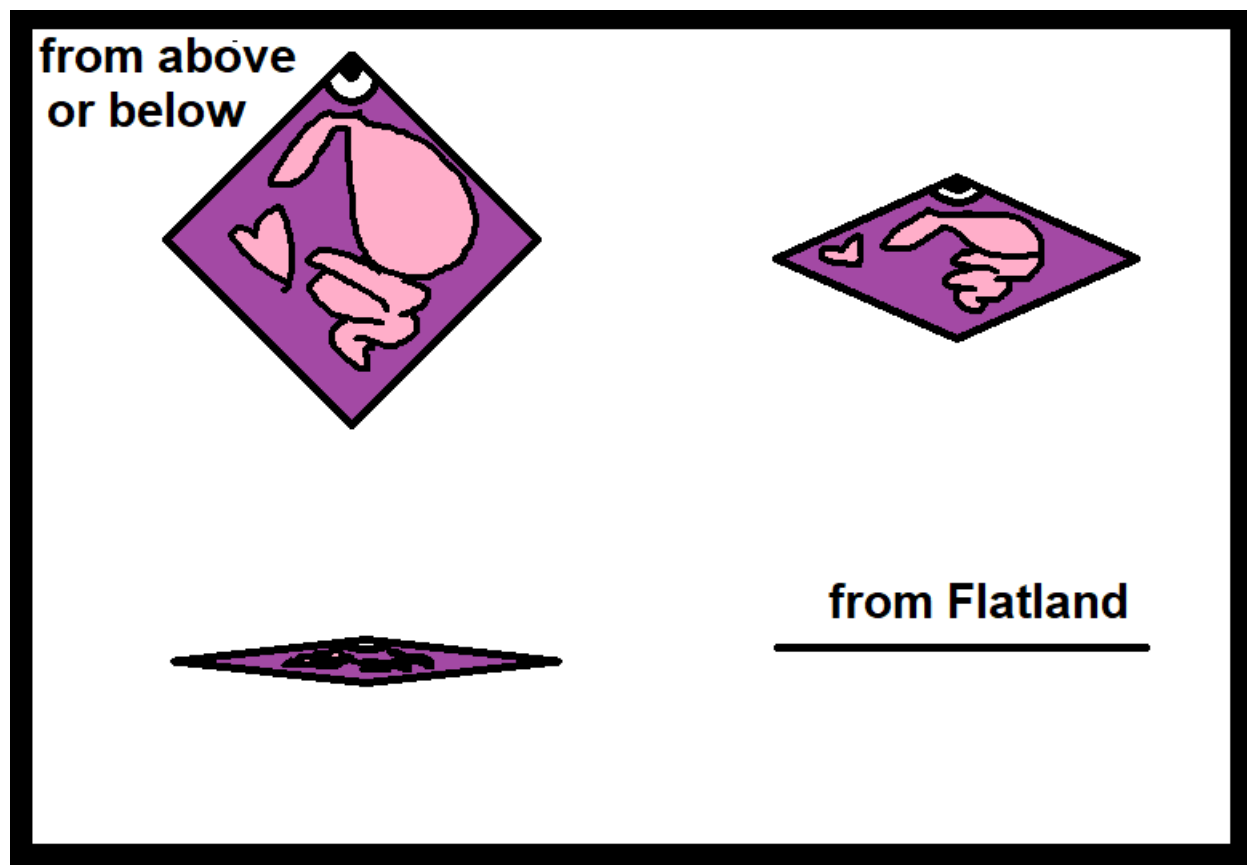
If not for the fascist society they live in, it can be assumed that Flatlanders would naturally come to theorize about other mathematical dimensions just like we have.

The only buildings allowed to have sharper corners than pentagons are ammunition warehouses and other military and government buildings that are not meant to be used by just any random person. It can be safely assumed that jails and asylums also have sharp corners to keep unwanted visitors away.

When seen from above or below, the internal organs of these geometric Flatlanders are clearly visible.

But they are not aware that their insides are visible from another angle, because, and I cannot stress this enough, they have no idea that the directions of “up” or “down” exist at all.

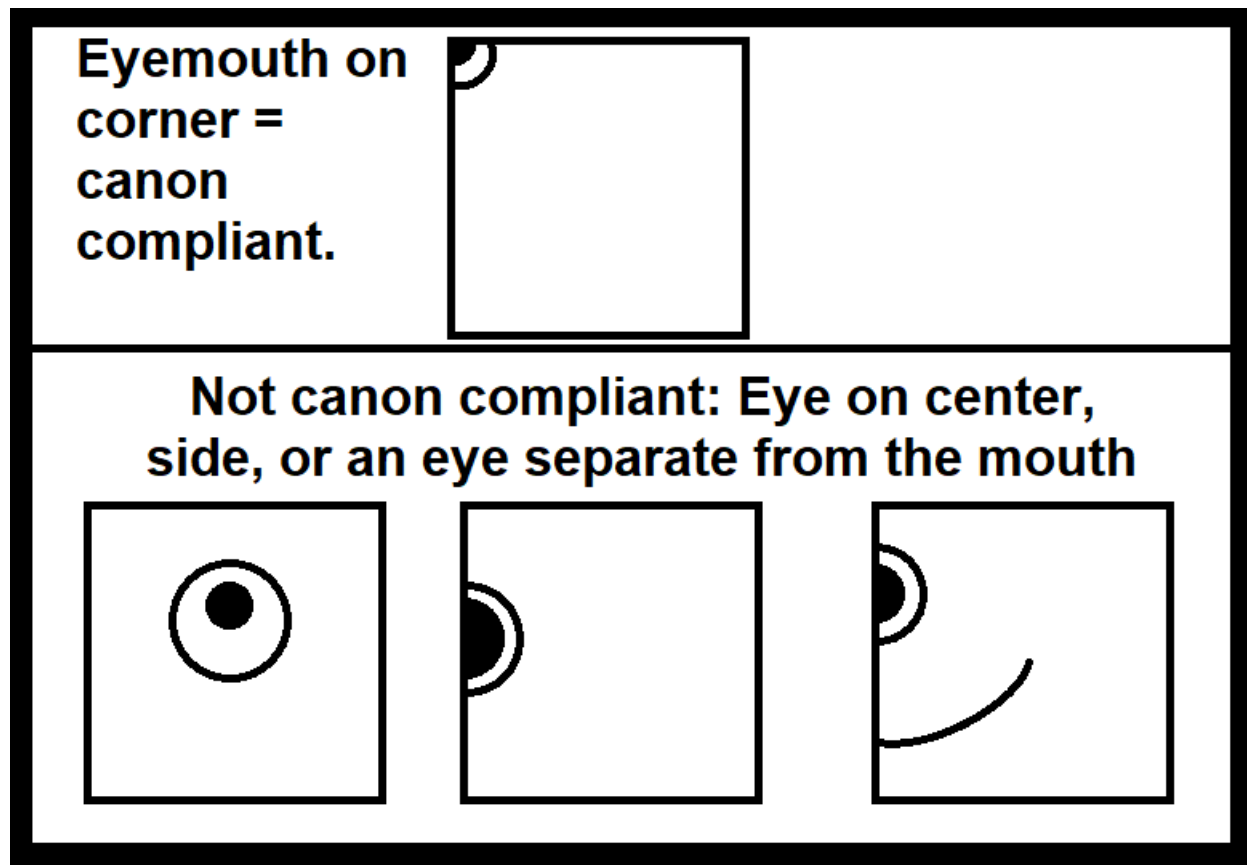
As far as they are concerned, they're completely solid, just like you and me.



[Image description start: A Square Flatlander first shown as seen “from above or below”, with the square shape clear, and the purple and pink insides visible. The square then warps as the point of view is lowered, until they are visible only as a black straight line, labeled, “From Flatland”. Image description end.]

What exactly their insides look like is up for you and I to speculate on, because the narrator didn't feel like giving a lecture on anatomy.

But we do know that Flatlanders each have a single eye, which, in some way that is never explained to us, doubles as their mouth. This eye-mouth will always found on one of the Flatlander's angles or points, where two sides meet.



[Image description start: A black and white collection of different square Flatlanders, with their eyemouths at different parts. At the top of the image is one with the eyemouth on the upper corner, labeled, “Eyemouth on corner equals canon compliant”. Below this are three more, one with an eyemouth in the center, seeming to look towards the camera, one with it on the middle of one side, and the last one has an eye on the side above a separate smiling mouth. Image description end.]

For Isosceles triangles, we know that their eye-mouth is on one of the points of their base, rather than their longer sharp point. For Straight Lines, just pick an end. For other Irregular Figures, go wild, pick whatever angle you want.

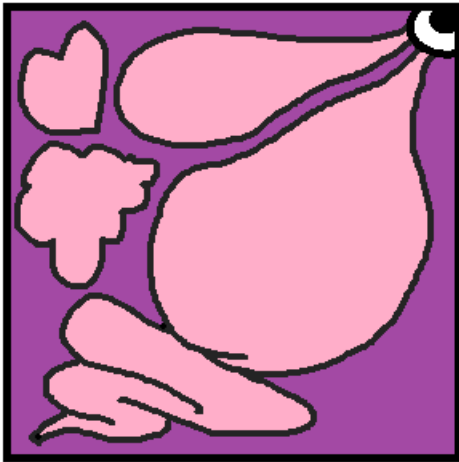
There is no such thing as a true Circle in Flatland, only Figures with many small sides, so you can just pick any part of a Circular character to put their eye, even if you're just simplifying them as a Circle. (I doubt anyone wants to sit there and figure out how to draw a shape with 600+ perfectly equal sides)

When in their natural habitat (Flatland) a Flatlander only ever sees anything they are looking at from its side, so that everything appears as a straight line, just at different lengths, levels of brightness, and distances.

You can see how this would work yourself by taking a coin, or a shape cut out in cardboard or paper, and putting it on a table.

When you look down on it from above, you see the shape it really is. But if you put your eye on the level with the table it sits on, it will appear as a straight line.

**A Flatlander  
seen from above  
or below has  
visible insides.**



**We do not actually  
know what the insides  
of a Flatlander look like  
because A. Square  
didn't tell us.**

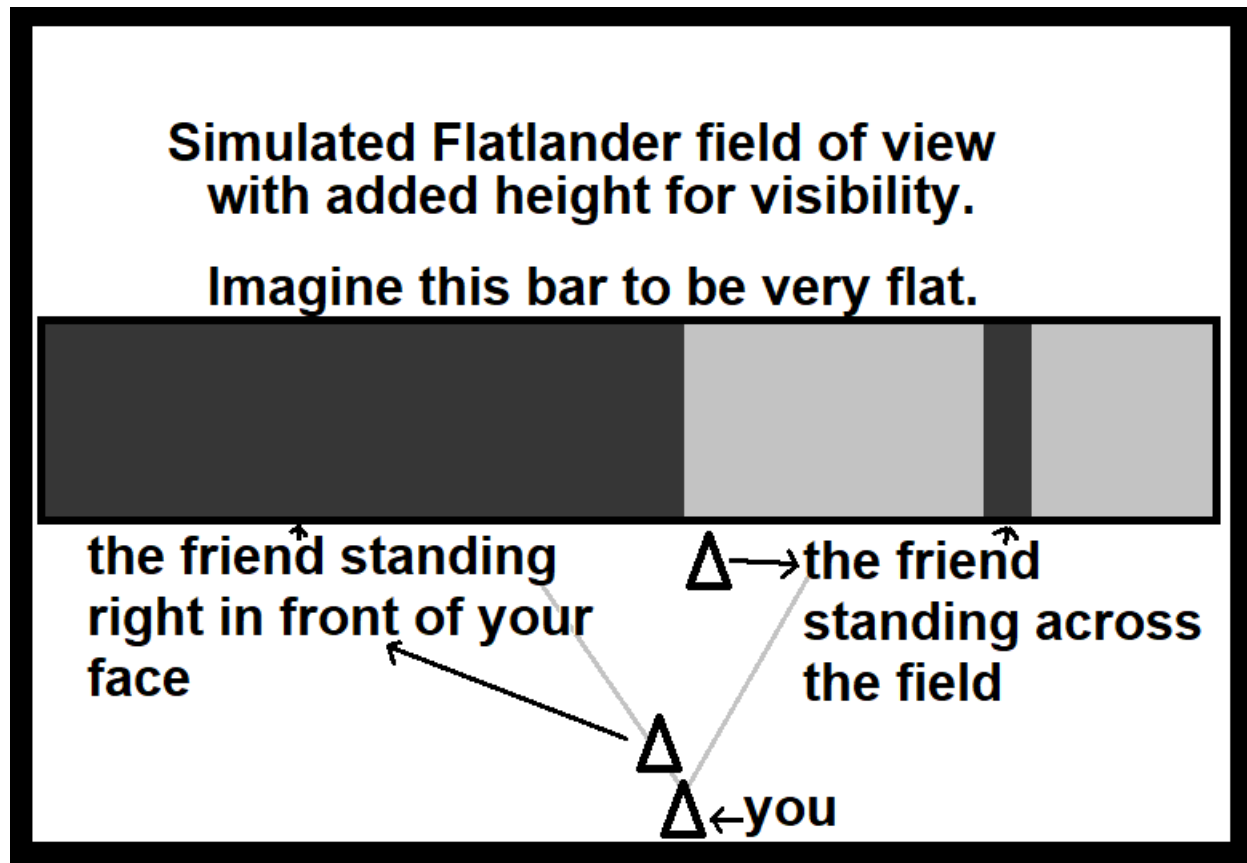
**A Flatlander seen  
from the side in  
Flatland appears to  
be a solid line.**

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[Image description start: First we have a square labeled, “A Flatlander seen from above or below has visible insides”. The square has a purple interior, with simple pink blobs for organs. Text after this reads, “We do not actually now what the insides of a Flatlander look like because A Square didn’t tell us.” Below is a straight line, labeled, “A Flatlander seen from the side in Flatland appears to be a solid line.”. Image description end.]

That straight line is how Flatlanders see everything when they are inside Flatland. Only from above can their true shape (and internal organs) be seen.

Everything, to a Flatlander, looks like a straight line. When someone or something is closer to them, the line appears longer from side to side, and when further away, it is smaller from side to side.



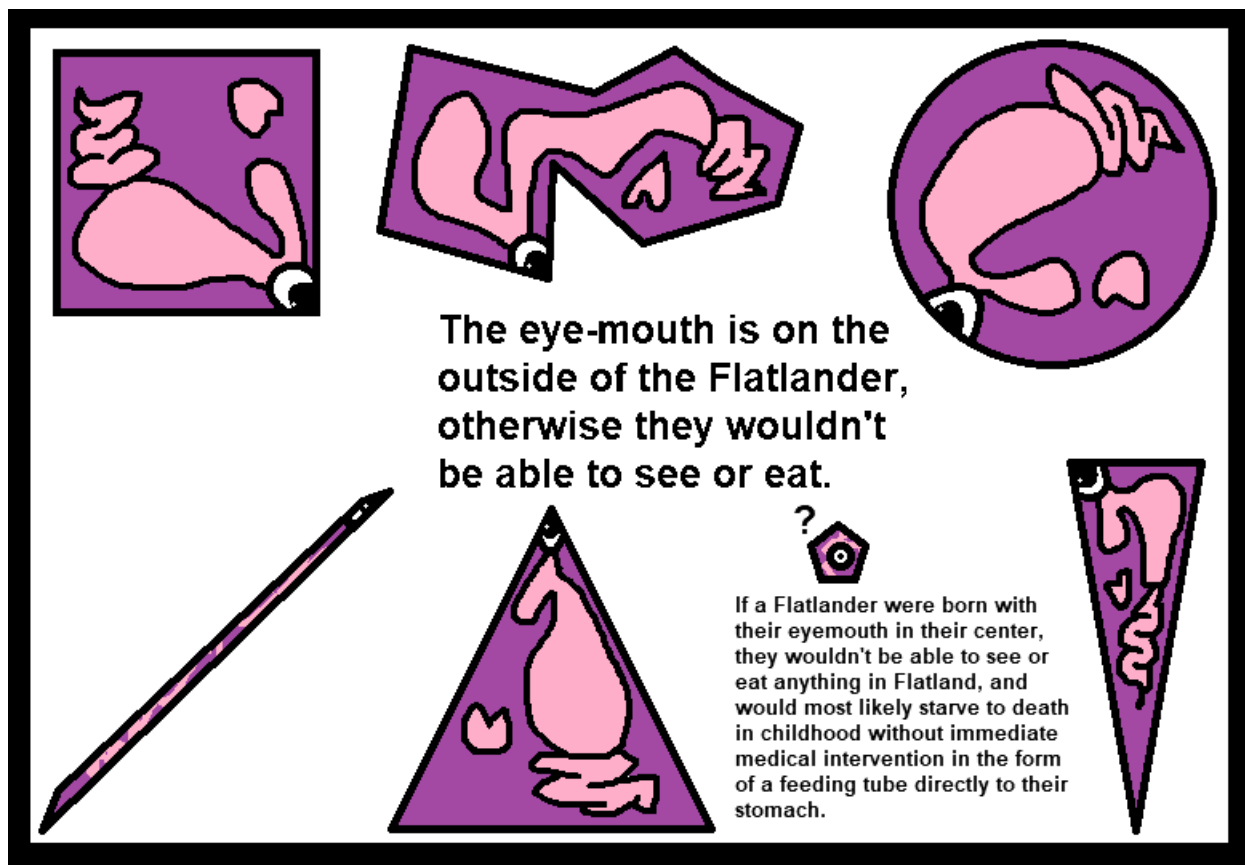
[Image description start: A diagram labeled, “Simulated Flatlander field of view with added height for visibility. Imagine this bar to be very flat.”. In the center of the diagram is a large bar, with one half colored in black, and the other half mostly grey, with a thin black stripe towards the right. At the bottom of the diagram are three small triangles, one labeled, “You”, one labeled, “the friend standing right in front of your face”, and the last is labeled, “the friend standing across the field”. Grey lines radiate out from the front point on “You” to show how the friend in front of “you” blocks most of your

vision, creating the large black section on the bar, while the friend across the field only blocks a smaller part, representing the thin black stripe on the other side of the bar. Image description end.]

This is why their eye-mouths are on their edges, because that is the only direction they can ever look, and everything looks solid from that angle.

If they had an eye-mouth on their upper or lower side, they wouldn't be able to see or eat anything inside Flatland, and they would only see what is above or below them.





[Image description start: A drawing of multiple Flatlanders of different shapes arranged around the edges of the image, all looking at text in the middle that reads, "The eye-mouth is on the outside of the Flatlander, otherwise they wouldn't be able to see or eat." The shapes looking at the center consist of a square, an irregular polygon, a circle, an isosceles triangle, an equilateral triangle, and a straight line, who is a very thin trapezoid. There is also a very small pentagon child who instead has an eye in the center of their body, looking towards the camera with a questionmark, labeled in smaller text: "If a Flatlander were born with their eyemouth in their center, they wouldn't be able to see or eat anything in Flatland, and would most likely starve to death in childhood without immediate medical

intervention of a feeding tube directly to their stomach.". Image description end.]

If you're planning to draw characters from Flatland, like with everything else about it, you can break this rule for stylization purposes, or you could do a story where a character is born with their eye out of the usual place, and is considered Irregular because of it. (They would also necessarily be blind and would need to find other ways to navigate and interact within Flatland, no matter what they can see above and below, unless it happened to be a mirrored surface.)

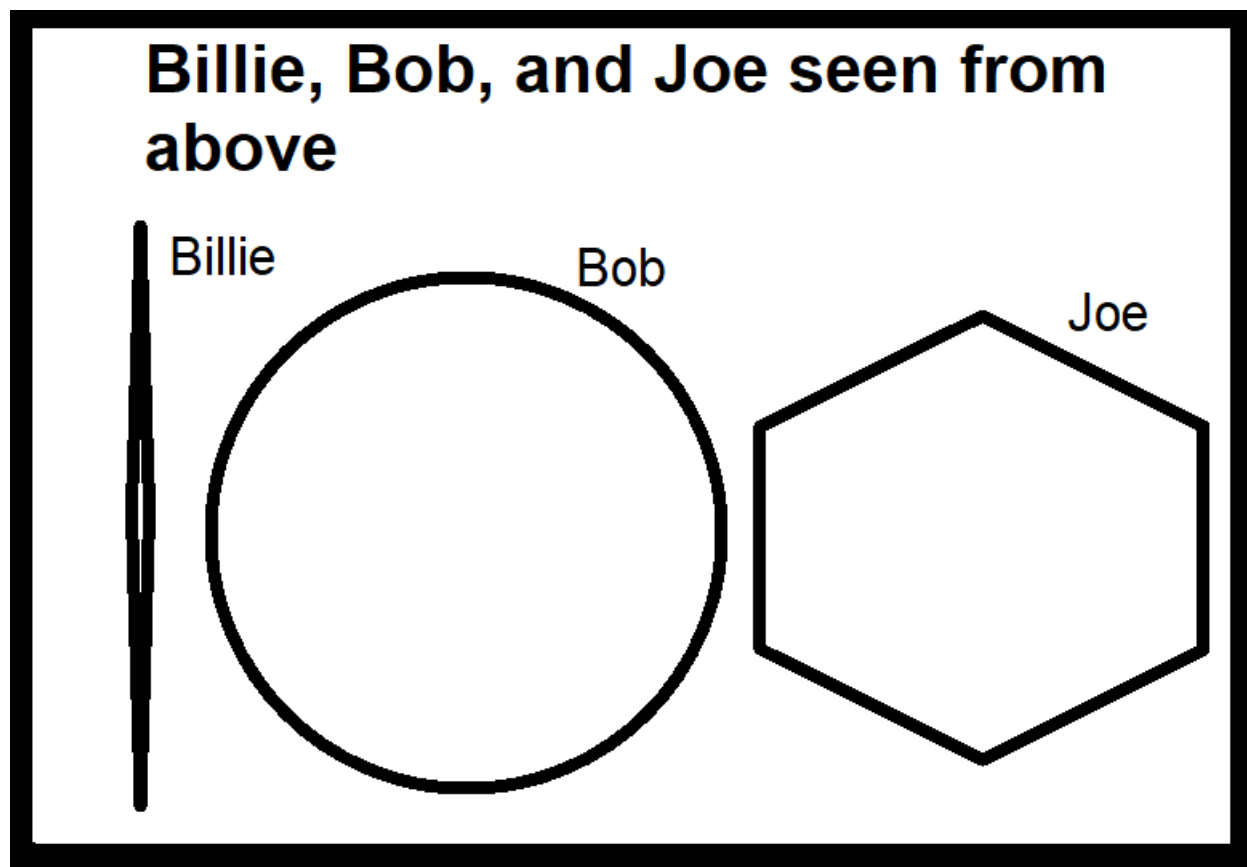
But when speaking of the original novel, this is how it works. Eyes are on the edges, not the upper or lower surfaces.

We do not have any details of what above and below Flatland look like, so it is up for any interpretation.

Despite everything they look at appearing as a straight line, Flatlanders are still able to navigate and recognize one another by sight, because the edges of Flatlanders, and other living things, all glow with automatic bioluminescence, and because in many places there is usually a dense "fog" in the air.

This means that when one Flatlander looks at another in an area with fog, the areas that are closer to them appear brighter, and the parts that are further away are darker.

Three Figures will help us demonstrate this idea so you can understand: Billie the Straight Line, Bob the Circle, and Joe the Hexagon.

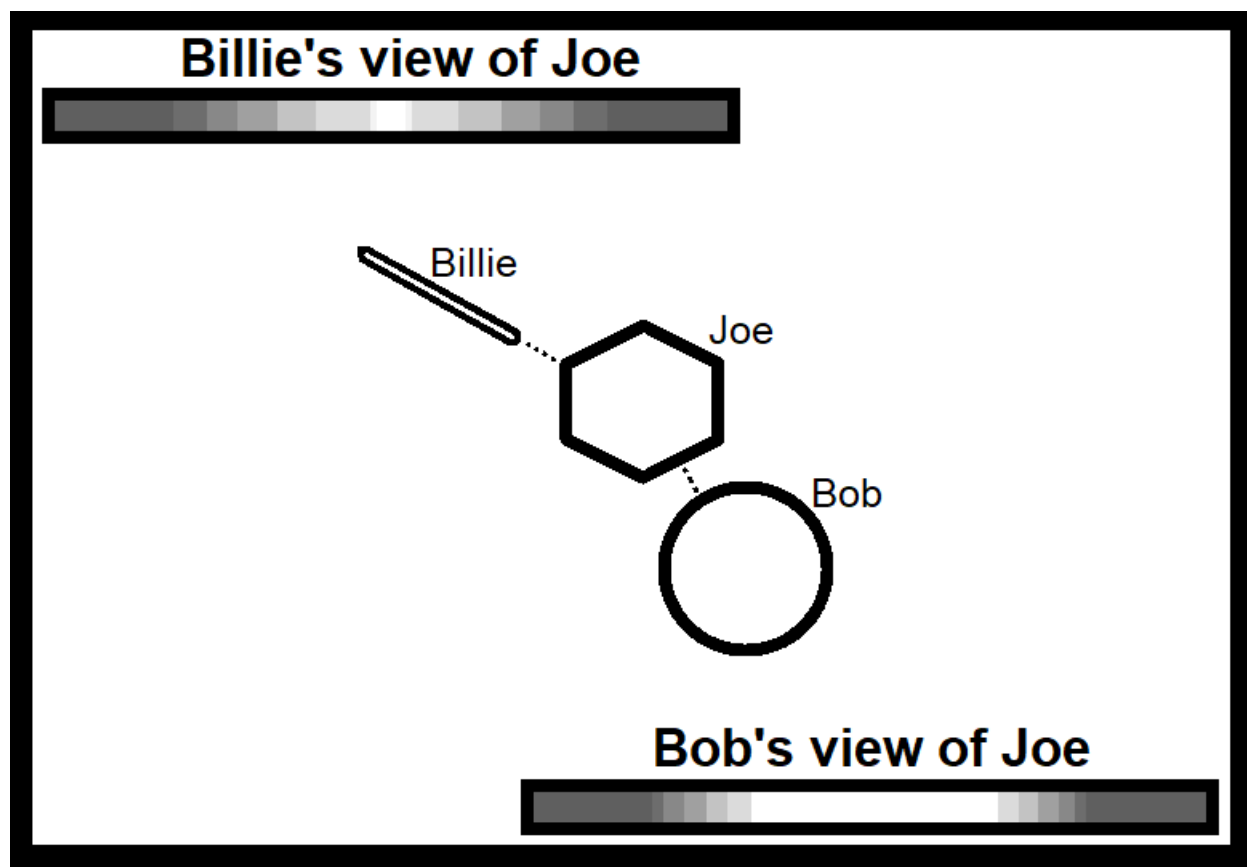


[Image description start. A diagram labeled, “Billie, Bob, and Joe seen from above”. Billie is a Straight Line, who is a very thin diamond shape. Bob is a Circle. Joe is a Hexagon. Image description end.]

If Bob the Circle looks at Joe the Hexagon so that one of Joe's flat sections is facing him, Bob the Circle will see a bright line in the center of his vision, with a darker gradient on either side.

The bright line is the flat section of Joe that is closest to Bob. The gradient on either side is what is visible of Joe's other angles from this perspective.

And if Billie the Straight Line looks at Joe from another angle, so that one of Joe's points is facing her instead of one of his larger flat sections, then Billie will see a small point of light, with a larger gradient from light to dark around it, because the closest thing to Billie is one of Joe's points.



[Image description start: Another drawing, now zoomed back, with Joe in the middle of Billie and Bob, who look at him from different angles. Billie looks at one of Joe's angles, and Bob looks at one of his flat sides. A bar at the top is labeled, "Billie's view of Joe", and has a thin white stripe in the center, with a slow gradient to grey on either side. At the bottom of the image is another bar showing Bob's view of Joe, which has a large white stripe in the center, with a faster gradient to grey on either side. Image description end.]

By using the different levels and gradients between brightness and darkness when looking at one another, Flatlanders whose families

are rich enough to send them to specialized private rich kid schools can learn to recognize different shapes from sight alone.

This is known as The Art of Sight Recognition, and it is very difficult to master, so difficult in fact that most Flatlanders rely instead upon The Art of Feeling – where Flatlanders gently and carefully feel along the angles of one another to figure out what shape they are. This is treated as a formal introduction (The difference between shaking hands while trading names, and simply saying 'hi').

But the Art of Feeling can be dangerous if you're not careful, because some shapes have very sharp angles that can cut, stab, or even outright kill someone if hit with enough force.

The Narrator tells us that one of his ancestors, who was an Isosceles triangle (A triangle with two sides the same, and another different), accidentally killed a man while he was being Felt, by accidentally moving too quickly because of pain from his arthritis, and ended up cutting the man who'd been Feeling him in half.

We are told that the “moral shock” of this action degraded the angles of the narrator's male ancestors for generations, but it is much, much

more likely that the people doing the measuring simply lied about their angles to punish them.

Higher class citizens look down on the Art of Feeling, not only because it's dangerous, but because they think it's "vulgar" simply because the poor people do it too. Instead, rich families spend a whole lot of money and time having their sons trained to use Sight Recognition alone, so they can feel special and more intelligent than the poor people.

Fun fact: The word "vulgar" literally means...anything done by the common poor people. It's used to mean "disgusting" today literally because rich people think literally anything poor people do is disgusting, gross, and shameful. Because they hate poor people. (This is also why there's some species with a scientific name ending in "vulgaris" if they're very common and easy to find)

To make sure that their male children aren't "contaminated" by the poor people, noblemen do not allow their sons to be taught the Art of Feeling at all, and must rely on Sight Recognition forever.

If, when they go to one of their fancy rich people collages, they're caught using the art of Feeling despite the rules, they will be given a warning the first time, along with some sort of punishment, and

expelled completely the second time. And once you get kicked out of one of these private schools, you can't go back.

Any nobleman who fails to learn the art of Sight Recognition, even after years in university being taught it, is completely shunned from the society of their fellow rich people, and no longer has the right to get married, for fear that they'd pass their inability to learn Sight Recognition down to their kids.

Why, you ask? Because fascism and eugenics go hand in hand. They literally want to "breed out" undesirable traits, so if you have some kind of disability preventing you from learning Sight Recognition, they don't want you to be able to have kids.

Since these "trash of the rich" (as the narrator calls them) don't know how to use Sight Recognition or the Art of Feeling, they're unable to interact with larger society at all, and lead miserable lives.

If given enough time, they could probably learn the Art of Feeling, if they were willing to get past the idea that it's "vulgar" and beneath them, but even then, the society of Flatland is so strictly separated by caste determined by your shape that there are no jobs that would, or even legally could, hire them.



There is another kind of Recognition used to tell people's classes apart, and it is done simply by listening to someone speak, and judging what class they're from based on their accent.

This isn't very helpful, though, because while poor people are easily able to mimic the accents of rich people, the rich people, who only ever hang out with other rich people, and only notice poor people's existence when they're thinking of how disgusting they are, cannot do the same in reverse, since they have no idea what poor people actually talk like.

And since all the rich people hang out together, and more importantly are desperate to fit in with one another and not stand out, they all speak in the same general way, so you can't tell from their Rich Person Accent alone whether they're an eight-sided Octagon, or a twenty-sided Icosagon.

When A Square wrote his autobiography, the societies he spoke of accepted only specific shapes as worthy of being called human beings with basic civil rights, insisting that humans could only be "Regular" Figures, meaning that all of their angles and sides had to match.

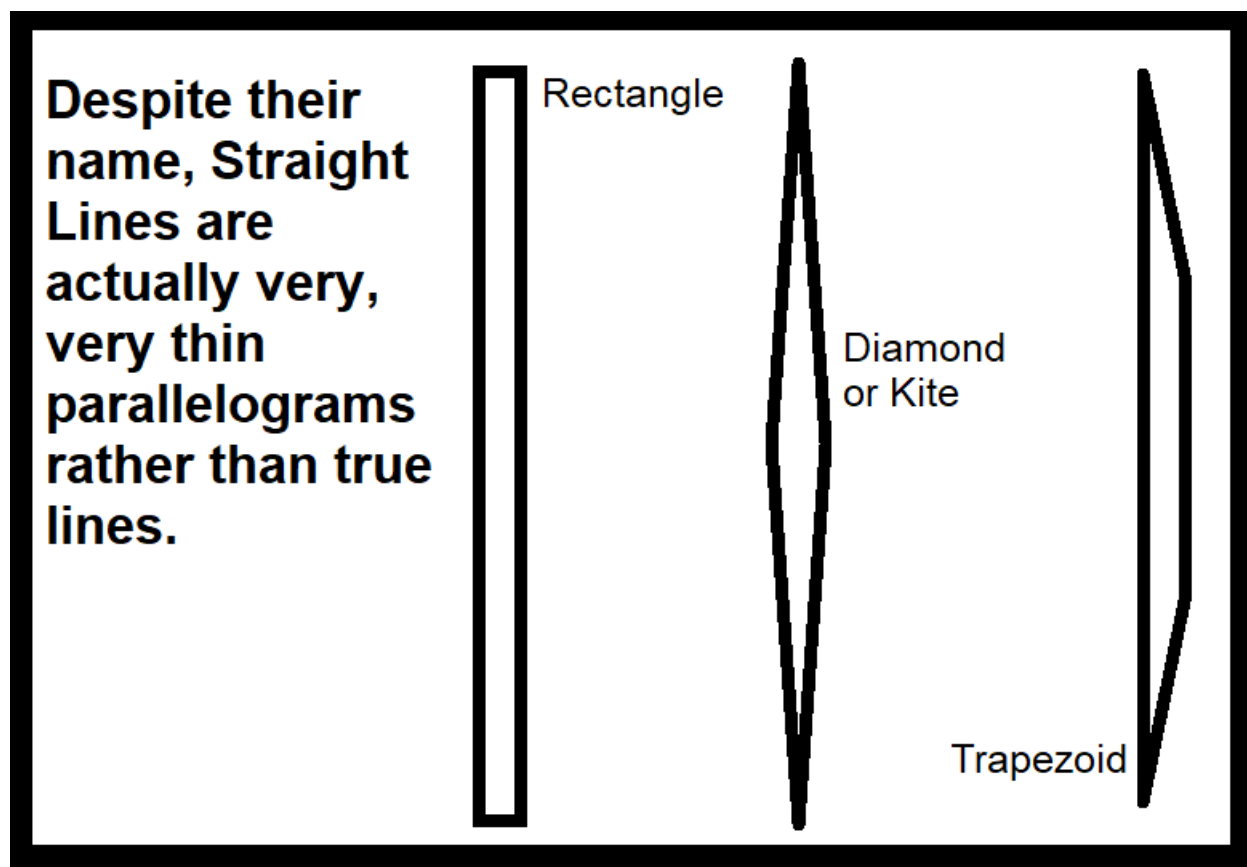
This meant that when the Art of Feeling or Sight Recognition were used for identification, only a single angle needed to be felt or looked at to figure out the whole shape.

These societies also considered all “Straight Lines” to be female, and every Figure that was not a “Straight Line” to be male.

Because Joe and Bob are, for the sake of this summary, “shapes” with multiple angles, so they would be considered Male, or Men, and Billie, being a “Straight Line”, and having “no angles” would be considered a Female, or a Woman.

But despite the fact that they are referred to as “Straight Lines”, Flatlanders who care about basic mathematics are in fact aware that so-called “Straight Lines” are actually all very thin parallelograms, a term that includes squares, rectangles, diamonds, and more.

Straight Lines are shapes too, with their own angles, just like everyone else, they just happen to be much thinner. And the people in charge of society are very aware of this fact, but spread the lies anyways.



[Image description start. A digital drawing captioned, "Despite their name, Straight Lines are actually very, very thin parallelograms rather than true lines.". Next to this are three examples of Straight Lines from Flatland: A rectangle, a diamond or kite, and a trapezoid. All of them are very thin. Image description end.]

Knowing this fact did nothing to change the bigotted insistence that Straight Lines lacked angles, and therefore literally lacked brains.

Because actual facts don't convince bigots to change their minds, because bigotry isn't logical, it just claims to be for a false sense of legitimacy. They benefit from the bigotry they're spouting, and they

don't care if it doesn't actually make sense or not, that doesn't matter, the only thing that matters is what they have to gain from spreading the lies.

## **Section 3: Irregular Figures and the Systems of Oppression in Flatland**

The lowest status members of Flatland society at the time the narrator was alive were “Irregulars”, which were shapes whose angles and sides did not all match, and, we can assume, Lines that were not straight, though the original book does not actually mention Irregular Lines.

It can be assumed that Irregular Lines existed just as much as other Irregular Figures, and they would be categorized as Lines depending on how thin they were compared to other figures.

The very obvious implication of Women being called “Straight Lines” in particular very clearly implies the existence of non-straight or Irregular Lines, otherwise they wouldn't need to specify that they're straight.

Irregular figures were not considered human at all in the countries the narrator knew of, and, in these countries, most of them were killed as soon as they were born if doctors decided that medical intervention couldn't “fix” the Irregularity.

In the original novel, Irregularity is used as a metaphor for oppressed people of all kinds depending on the situation, including intersex people, disabled people, people of color, Queer people, and more, depending on the situation.

The act of surgically altering infants who are considered “Irregular” to "fix" is a very clear parallel to the physical violence intersex people face in reality, along with some disabled people.

This system of Regular-Superiority meant that Equilateral (also known as Equal-sided) Triangles were the lowest class of Figures acknowledged to be human, because they had the lowest number of equal sides and angles possible, which is three. Any less than that, and you can't get equal sides or angles.

These societies had a very strict caste system, where your shape determined everything about your life, from the kind of jobs you would be allowed to work, who you could marry or even speak to, and where you could live.

Isosceles are triangles who have exactly two angles and sides that do match, with a third side and angle that are not matching.

These are not to be confused with Scalene triangles, who have no matching angles at all.

Neither Isosceles, or Scalene triangles were considered human, and they had no civil rights at all, though Scalene triangles were not mentioned by that name. They would simply be referred to as Irregular Triangles.

Isosceles were the lowest class of Figure allowed to exist within the narrator's society without being murdered on sight in most cases, because, while they were still Irregular, they were the least amount of Irregular as a Man could get, with only a single side/angle not being equal.

Triangles with no matching sides at all, meaning Scalene triangles, were not tolerated within any of the societies the narrator was familiar with, and would presumably be murdered on sight, or as soon as they were born, if their Irregularity could not be surgically “fixed” to make them either an Isosceles or an Equal-sided triangle.

To reiterate again, Isosceles triangles were not considered human beings, due to being Irregular.

They were considered property, and were bought and sold as such, often being inherited from family lines along with the land they labored on.

Isosceles were forced to perform all of the most dangerous, difficult, degrading, and tedious jobs, while also serving as expendable soldiers for the military, and private armies.

They were were also used as cleaning and serving staff for middle and upper-class families, working as butlers, errand-boys, dishwashers, and more, and would be inherited along with the house they were attached to, if they weren't sold or gifted separately.

Also known as: they were enslaved. They were slaves. A person who is property is a slave.

The measurement of an Isosceles' unequal angle would determine their social status among other Isosceles. The closer your angle was to 60 degrees, the higher your comparative status, which would give you access to better and safer work assignments than those with lower angles.



Instead of being used to clean the disease-ridden, clogged sewers, for example, or working in a mine, you might instead be washing dishes in a rich guy's mansion.

Isosceles with very small angles were, among other things, regularly used as expendable executioners; they would be brought in to kill prisoners who were involved with state secrets, only to then be killed themselves to avoid being able to reveal those state secrets to others, even if they hadn't actually heard the prisoner say anything.

Isosceles were treated as completely disposable non-human things barely worthy of being considered people.

In these fascist societies, Irregularity was conflated with moral bankruptcy, meaning anyone who was born anything except perfectly Regular was considered to be inherently evil, which was the excuse given for murdering and inflicting other cruelties on these people at every opportunity.

But even during the narrator's lifetime, there were people trying to fight back against this idea, spreading pamphlets pointing out that if a child was born Irregular, and he had to face abuse, hatred, and bullying from his nurse, siblings, and even parents for as long as he could remember, and was constantly told that he was inherently a

bad person no matter what he did, and then was shoved out into the world where he was constantly followed by the police under the assumption that he was going to commit a crime, and he was not allowed to have a job or get married, and had no friends to speak of.

If you deny someone literally every opportunity to do good, what other choice do you give him except to be bad?

If you will not let him honestly work for his food, where do you expect him to get it besides from stealing?

In other words, treating people like they're inherently immoral, untrustworthy, and dangerous, and refusing to let them have any opportunities for "honest work"...literally means they have no choice but to become the criminals you've told them they are since they were born.

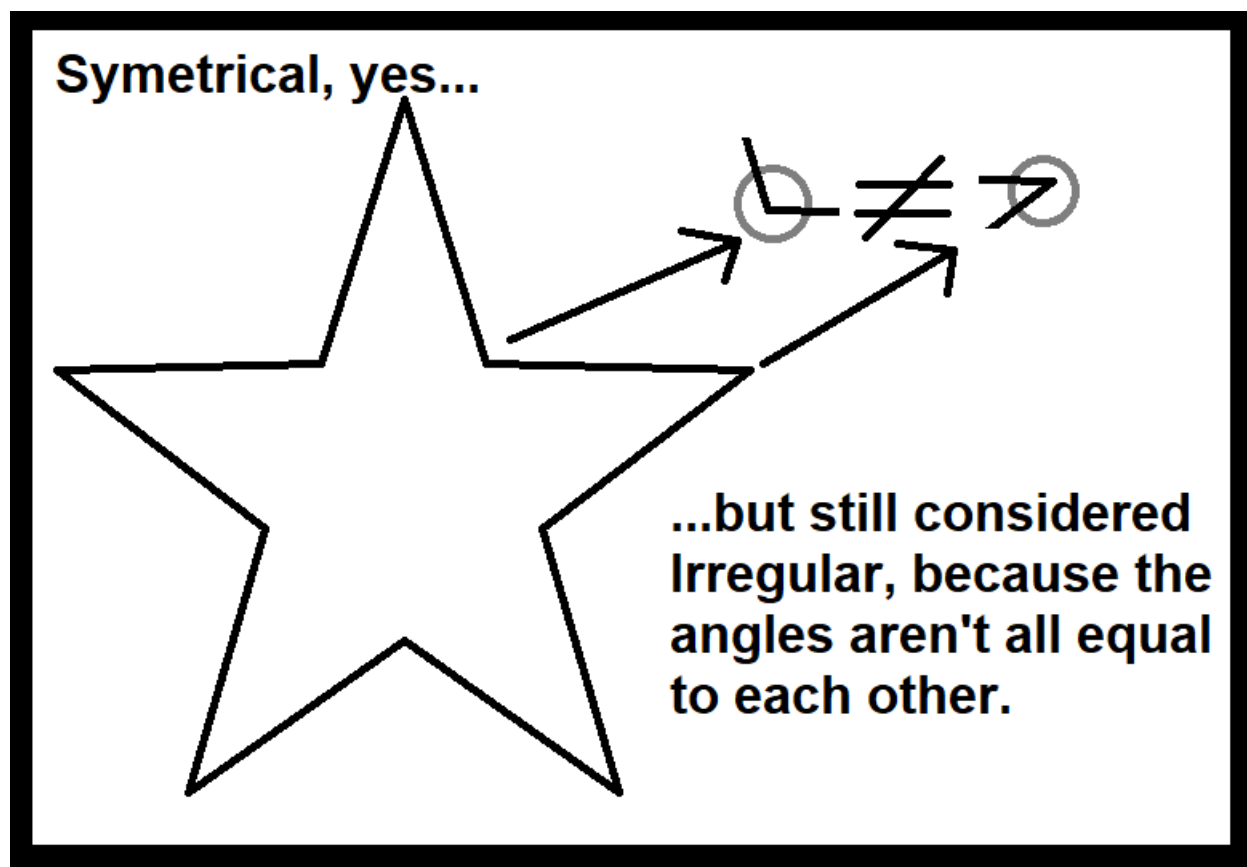
The narrator was not convinced by these pamphlets, even though he admits they are "very plausible", because he insists that he's never met an Irregular who wasn't a horrible person who deserved everything he got.

He admits that the lives of Irregulars are horrific, but says that's just too bad, because their lives just have to be horrible to make sure everyone else's are good.

We do not know the details about any specific Irregular characters, because they were only ever mentioned as hypothetical.

Any shape that does not have all equal sides and angles would be considered Irregular, regardless of any other equality or symmetry about the shape.

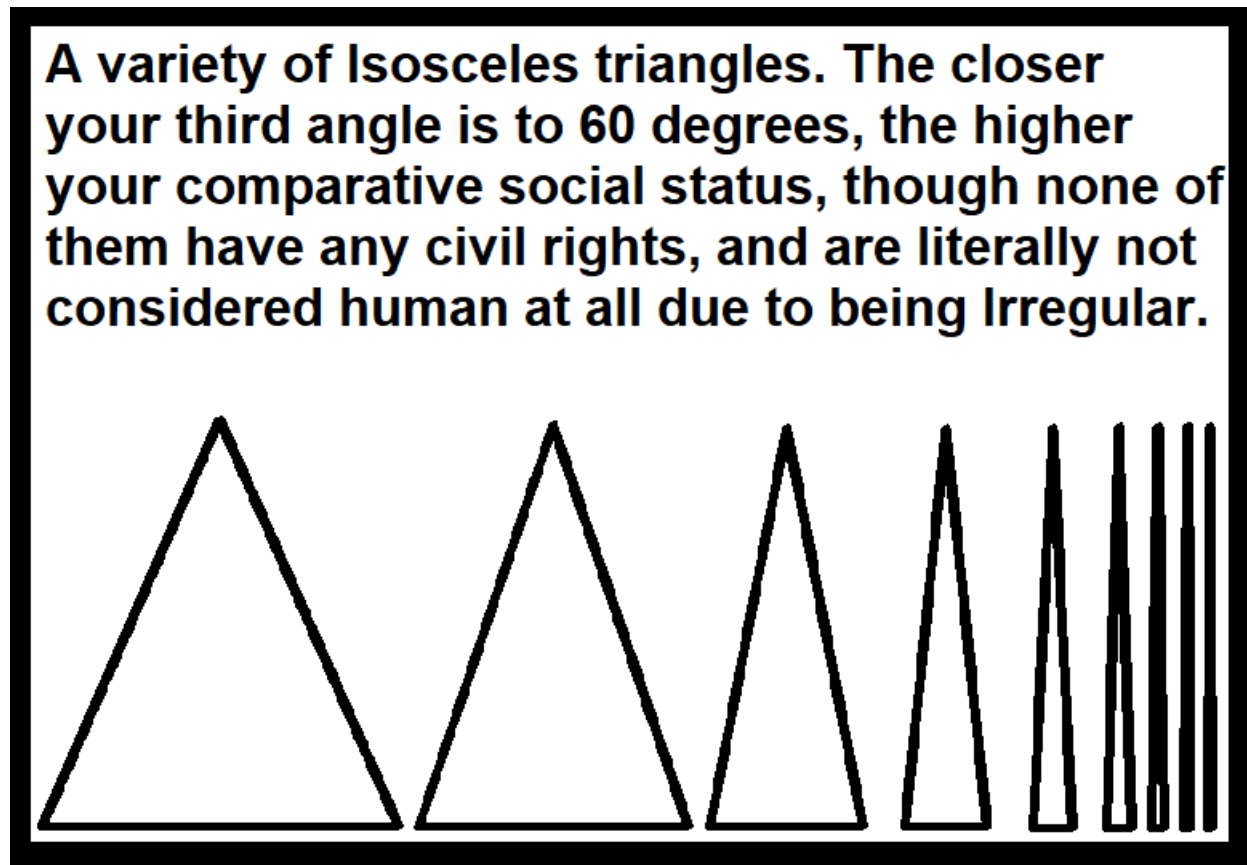
A perfectly symmetrical five-pointed star, for example, would still be considered Irregular even though it's symmetrical, because the wider angles on the inside do not match the sharper angles on the five points.



[Image description start. A black and white diagram showing a five pointed star, with text reading, “Symetrical, yes...but still considered Irregular, because the angles aren’t all equal to each other”, with arrows pointing to show that the acute angles on the outer points do not match the obtuse angles on the inner sections. End image description.]

The same would be true of many other shapes as well. The eugenicist goals of Flatland were incredibly specific and restrictive.

If all three of your angles were measured at 60 degrees, you weren't considered an Isosceles, but an Equal-sided triangle, and you would have basic human rights.



[Image description start. A diagram captioned, "A variety of Isosceles triangles. The closer your third angle is to 60 degrees, the higher your comparative social status, though none of them have any civil rights, and are literally not considered human at all due to being Irregular.". Below this is a line of Isosceles triangles, starting with the widest angle on the left, then getting narrower towards the right, until the last almost appears as a straight line. Image description end.]

Isosceles with angles approaching 60 were regularly put into arranged marriages by Circles in an attempt to “breed” children who would be born Equilateral triangles. More eugenics.

If an Equilateral triangle were born to any Isosceles family, whether through the explicit eugenicist program run by the Circles, or by random chance, the infant would be immediately taken away from their Isosceles family, and given to an Equilateral family that did not have any children.

The adoptive parents are then sworn to never reveal the child’s true birth parents, and never to let the child anywhere near them, with the fear that their Irregularity might be contagious and infect the child with proximity.

The birth of an Equilateral triangle from the Isosceles class is celebrated for miles around, because it is used as “proof” to the Isosceles slaves that if they just work hard enough, they can win a better future for their children. They are told that hard work, frugality, and self-control will increase their chances of having Equilateral children.

This is patently not true, but it is a helpful lie for the Circles to spread, because it means their force of free labor works harder and

doesn't complain as much when they don't have enough to eat. It is the same myth that is spread today, of the "self-made millionaire".

The rich will always tell you that simply working hard and being a good person is what got them where they are today. The truth is that they were just born to rich parents, and maintain and increase that wealth through exploitation of the working classes, just like the Isosceles of Flatland are exploited for the benefit of the higher classes.

The angles of Isosceles were categorized in a range from 0.5 to 59.5 degrees.

This meant that their angles could be useful for learning the Art of Feeling, because they could be used to learn different angle measurements, which would then help you learn to tell different shapes apart.

Because of this, a huge number of Isosceles, especially those with smaller angles and thus lower status, were sold to elementary schools for middle and upper class children to learn the Art of Feeling.

The children would continually Feel the Isosceles, using them as a human guinea pig for learning angles.

Yes, this is exactly as horrifying as it sounds. Imagine being chained up so that you can't move a muscle, while children grab and poke at you all day, every day, until you die from starvation.

Yes, starvation. Expensive schools with higher budgets would allow the Isosceles prisoners to literally starve to death while being tortured every day by probably hundreds of children.

A Flatlander going without food or water could survive for around a month, which meant these prisoners spent their last month of life being tortured to death not only from the starvation and dehydration, but constant poking, prodding, and, since kids also have sharp angles, probably also many cuts and bruises.

When they died, the rich school would simply buy a new slave to replace them with.

We do not know how they disposed of the bodies, or what exactly happens when a Flatlander dies.



Schools that could not afford to keep buying new slaves every month would provide the ones they did have with food and water, keeping them alive for years on end, before eventually replacing them with “fresh specimens” when they eventually died, or became too scarred from constant feeling to be “useful” anymore.

The narrator of the book originally advocated for allowing these enslaved people to starve, specifically in the hopes of “thinning their numbers”, which he made sure to tell us was a goal every politician agreed on.

In universe, after the narrator was imprisoned for seven years, thinking about what the Sphere had said to him, he became much more progressive in regards to the treatment of Women and Isosceles, though we don't actually know if he'd now want to abolish slavery.

From an out of universe perspective, the entire point of him being such a blatant bigot in the first place is, I feel the need to remind people, specifically done to make the bigotry absolutely clear and make people think of how reprehensible it is.

You are supposed to look at the narrator casually and happily advocating to let people starve to death while being tortured and

think “holy crap what is wrong with this guy and the rest of his society?”. And then you’re supposed to take that idea and look at what is going on in the world around you and see if that outrage has a target in the real world, because it probably does.

In the United States, slavery is still literally legal, as long as it’s imposed as a punishment for a crime. That’s literally what’s written in the constitution as of 2024, and has been since slavery was supposedly “abolished”.

Prisoners in the United States as of 2024 are literally, by law, enslaved. They are forced to fight wildfires. They are forced to labor without pay, or for just pennies an hour doing difficult and dangerous work. And this is literally slavery as defined by the Constitution of the United States, which say it’s fine actually, because slavery as punishment for a crime is good.

Many people are explicitly arrested and sent to jail for the purpose of serving as slave labor, and most of these people are Black and brown. Minor crimes that a white person wouldn't think twice of committing can ruin your life and make you into a literal slave if you've got the wrong skin color.

And yes, this was implemented literally to keep American Slavery going even after pretending to end it. All the slaveowners had to do was arrest their former slaves on fake charges, and wow, would you look at that, they're enslaved again, and no one's gonna start another civil war over it!

Even though they should.

Flatland was written to criticize the systems of oppression in Victorian England, but the criticisms themselves are timeless, and can apply to bigotry anywhere.

Back to the summary.

Isosceles triangles made up the majority of the non-Straight Line population in the narrator's country.

Next in the social order of recognized classes in Flatland would be Straight Lines, who are considered Women.

Like Isosceles, they have no civil rights, but unlike Isosceles, they are not all enslaved, nor are they casually tortured to death inside elementary schools. They are not allowed have a job outside the home, or get an education, but they are still much better off than any

Isosceles, who is not only denied an education, but is also, and I cannot stress this enough, literally enslaved, and regularly tortured to death. Especially if they are part of a higher class of shape – the daughters and wives of Equilaterals and up have many more privileges than the daughters and wives of Isosceles.

Many bigoted people read Flatland and pretend that high-class Straight Lines are the most oppressed people in the setting, because they've decided to ignore the fact that Isosceles are literally enslaved and tortured to death in elementary schools, along with all of the other dangerous and degrading labor they're forced to perform.

You, my dear reader, will not ignore this, will you?

You will not make me or anyone else suffer through essays and fan-sequels that pretend it's good that the Isosceles are literally enslaved and tortured while you pretend that they are treated better than every single Straight Line in the world, will you? Because if you do I will be absolutely ashamed that you ever read this summary and still came away with such a horrible understanding of the systems of oppression in Flatland.

Look up White Feminism and why it's bad. Ignoring the oppression of marginalized men to pretend that women are the only oppressed people who exist will always be racist, ableist, and more.

The Flatland version, you might say, could be called Straight Line Feminism. And I do not want to have to deal with any more people pretending it's good and true.

Do not pretend that Straight Lines are the most oppressed people in Flatland, and are all equally as oppressed as one another, as though there's no difference in the life of the wife of a Circle and the wife of an Isosceles. Just don't do it. Do not brush the treatment of Isosceles and Irregulars under the rug because you think no one besides the metaphors for rich white women can really be oppressed or has rights worth fighting for.

Straight Lines are oppressed. But you cannot pretend they're the Most Oppressed people in Flatland when the other oppressed people are literally being enslaved and regularly tortured to death, or just flat out murdered on sight.

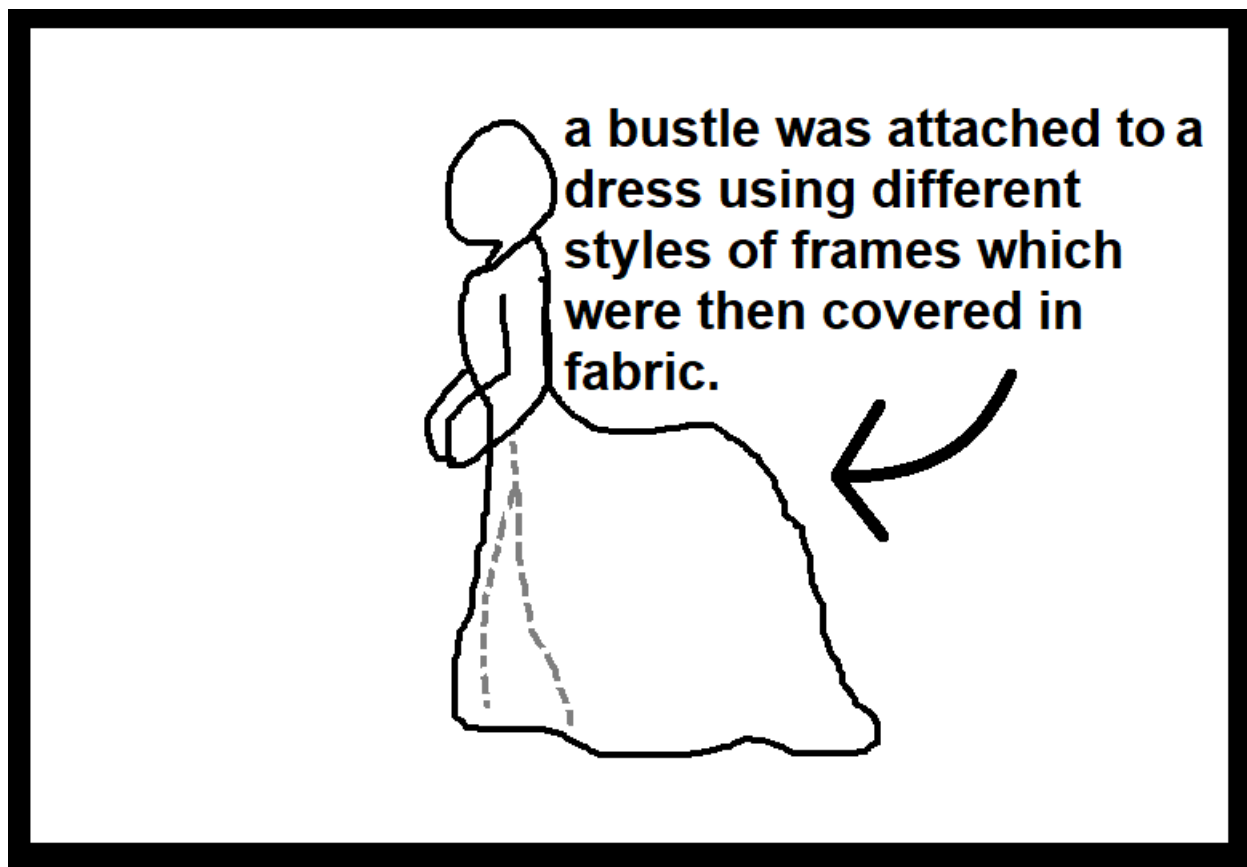
If you are writing stories where the characters are fighting back against the injustice in Flatland, they need to be fighting back for the

rights of everyone, not just the Straight Lines whose husbands and fathers are Circles and Hexagons and Squares.

Now let's get back to the summary. Again.

Straight Lines are in some countries of Flatland required by law to constantly move their back end from side to side to make them easily visible to anyone who might be standing behind them.

This is for two reasons: 1: to let Edwin Abbot Abbot reference the bustles on dresses that were in fashion during the era the book was written.

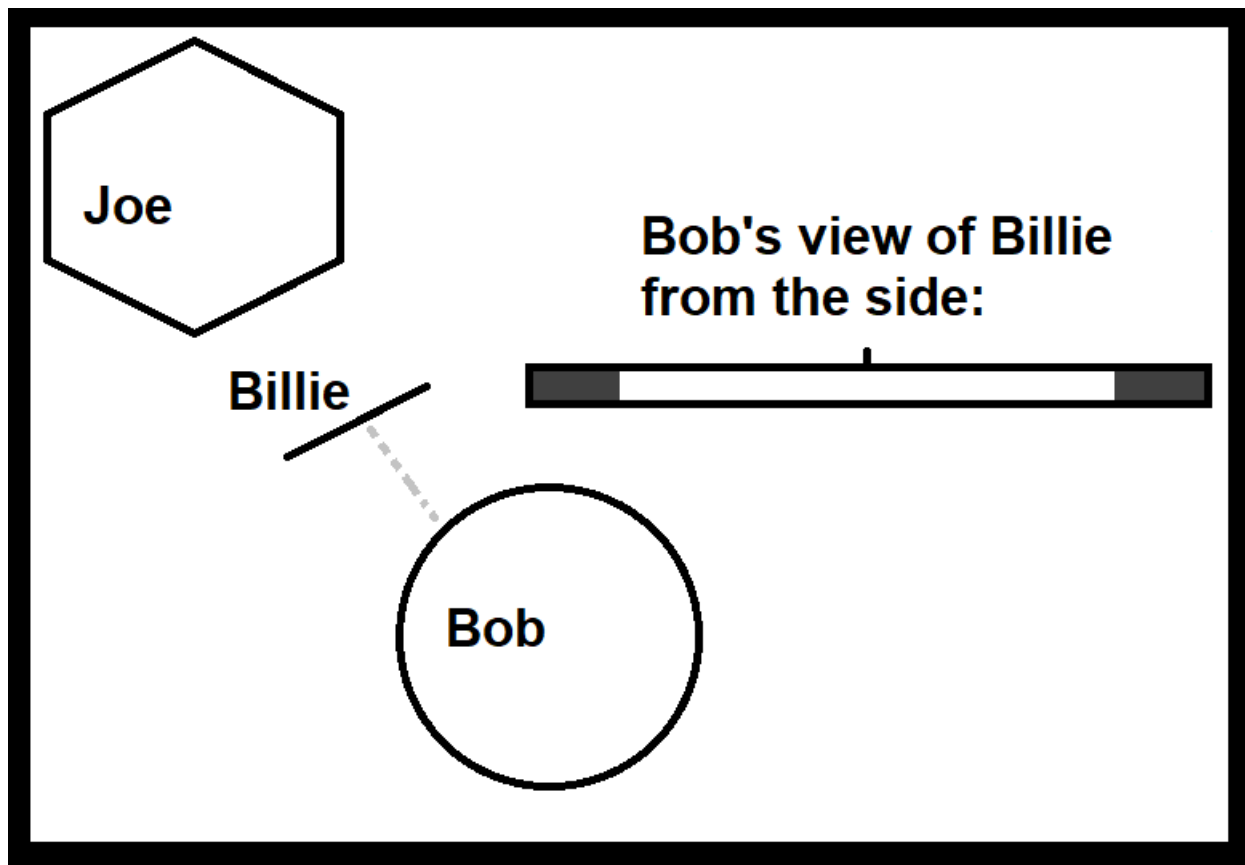


[Image description start. A simple digital scribble of a stick figure wearing a dress with a large bustle in the back making the person look like they have a big butt, with dotted lines showing where the legs are under the fabric. There is an arrow pointing at the bustle, labeled, "A bustle was attached to a dress using different styles of frames which were then covered in fabric.". Image description end.]

2: To make Straight Lines easier to see.

Flatlanders are bioluminescent on their their edges their eyemouths. The level of brightness from their eyemouth is even used to indicate mood.

From the sides, a Straight Line appears as a glowing line, which is easy to see. Billie, Bob, and Joe, will demonstrate again:

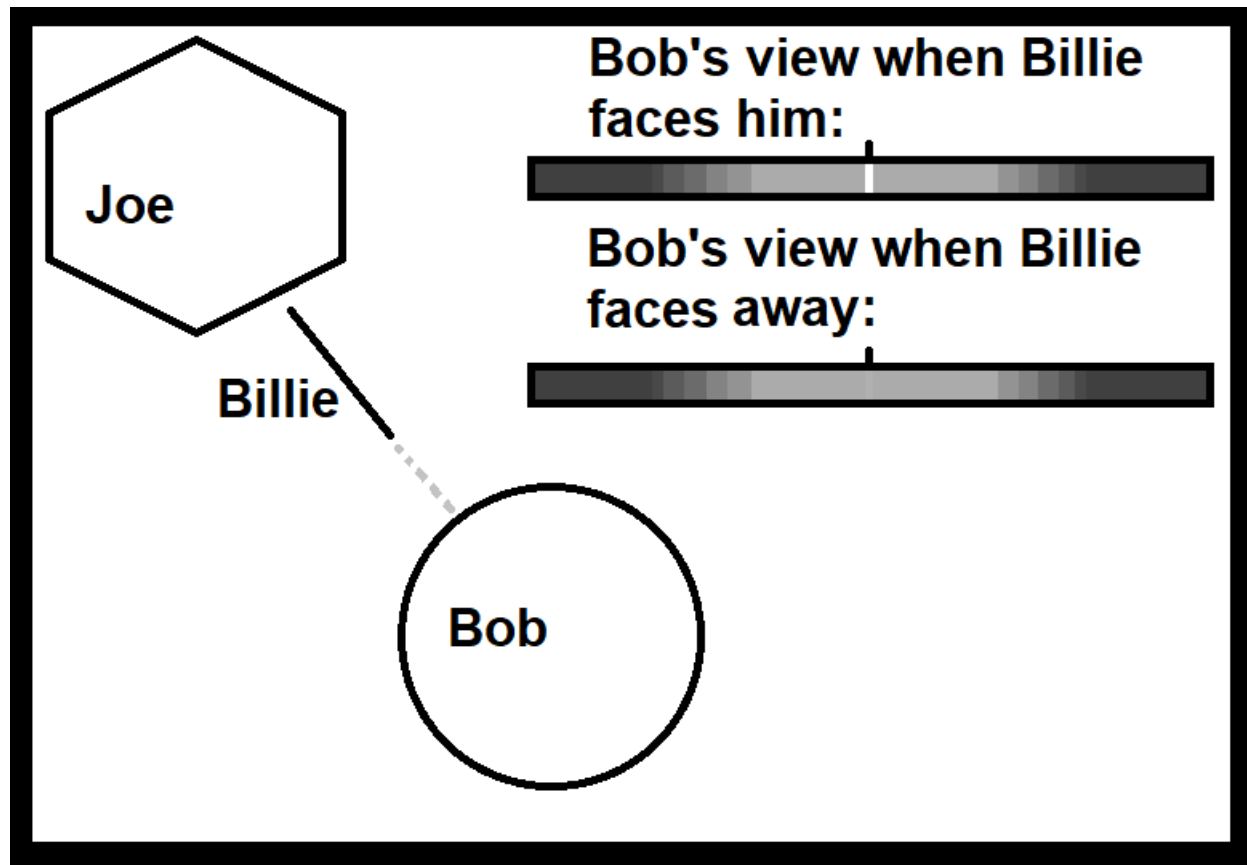


[Image description start. Another diagram like the one above, but now Billie is turned to the side so that her flat sides face her friends instead of her points. Now there is a single bar showing Bob’s perspective, labeled, “Bob’s view of Billie from the side:”, and shows a single white line, with no gradient. End image description.]

From the front, they appear as a glowing point. This is a bit harder to see than a full line, but still visible.



But from behind, their end point does not glow as brightly, and because of this it's hard to see them, because of how tiny their end point is compared to everything else you might be looking at.



[Image description start. A digital diagram with a black border showing three shapes: Joe, a hexagon, Billie, a straight line, and Bob, a circle. Billie stands between Joe and Bob, with both of her ends pointed towards her friends. There are two bars in the upper corner showing what Bob sees. The first is labeled, “Bob’s view when Billie faces him:”, and shows Billie’s face as a thin stripe of white, in the center of Joe, who appears as a large grey bar, which then fades to the background.

The second is labeled, “Bob’s view when Billie faces away:” and

shows the same gradient as before, but instead of the thin stripe of white in the center, it is now a grey just a few shades lighter than the grey of Joe behind it, making Billie very hard to see in comparison.

End image description.]

By moving their rear end back and forth, that dim speck becomes easier to notice, so you're less likely to run into them. Something which could be very dangerous if you were moving quickly, because of how sharp they are.

They are also expected to keep up a constant "Peace-Cry", or a humming noise, so that anyone can hear when they are near.

It should also be noted that Straight Lines are also used to represent Women as another reference to ongoing social issues at the time the book was written.

At the time, fancy hats were very fashionable for women, and to keep them in place, people would use a long sharp pin to stick through the hat and through their hair, holding everything together.

This wasn't a problem for anyone, until women who were harassed or attacked realized they could use these hat pins to defend themselves.

And then of course everyone got all up in arms – not because these women were being attacked, but because they dared to defend themselves and their boundaries.

Instead of punishing the men who were harassing women, the women were punished for defending themselves.

Laws were passed to regulate the length that hat pins could be, and anyone wearing one longer than the limit would be, in some places, fined over a thousand dollars in 2024's money.

Straight Lines are categorized as Women in Flatland because if they weren't treated horribly, they'd have less reason to kill people.

No one in Victorian England woke up in the morning and thought to themselves, "I'm gonna stab someone with my hat pin literally just for fun".

And the Straight Lines did kill people, especially in areas where they were forced to endure harsher restrictions, like in some countries of Flatland where they were not allowed to leave the house at all except during religious holidays, or had to always be escorted by a male relative.

Men who abused their wives were likely to end up dead at the end of their sharp stingers, and this led to many laws being passed with the goal of preventing this. No, before you get excited, the laws were not designed to protect these wives from abusive husbands. Just like with the hatpins, the laws were passed to punish the wives and allow the husband to abuse them in safety.

Straight Line's apartments within their home (Think of it as a hotel room if you're unfamiliar with the concept of apartments being inside a larger family house) were required to be built very narrowly, so that Straight Lines couldn't get in or out quickly. If they wanted to move from one room to another, they'd have to carefully back up, move forward, back up, and move forward again in very small, slow increments to avoid getting stuck or hitting walls.

This was explicitly done to prevent them from murdering anyone who upset them while they were in their room, which Multi-Angled Figures took full advantage of.

There were also the specific, separate, narrow doors that Straight Lines had to use at all times, as I mentioned in the description of their houses.

Straight Lines were not allowed to have an education, and were lied to almost every moment of every day by the other Figures around them, who would say one thing within their earshot, and then say something completely different when they left the room.

The narrator tells us that the way things are spoken among only “Men” versus in the earshot of “Women” are so different that they may as well be separate languages. They lie to Straight Lines and claim to love and care for them, and pretend they think they are the most beautiful and amazing things ever created. But in reality they think they are nothing more than mindless creatures who hardly even deserve the label of person.

This double-language becomes a problem for younger non-Straight Line Figures, who spend their first three years of their life being raised by their mother or nursemaid, or any older sisters, learning the language of emotions and kindness, only to then suddenly be ripped away and told to forget all of that and think only in terms of calculation and efficiency, and to despise and look down upon the very person who’s shaped their whole life so far.

The narrator was worried about the strain this sudden revelation puts on the minds of young male children, and worried that one day, one

of them might reveal to their mother exactly what her husband and his friends think of her.

This concern has, surprisingly enough, made the narrator advocate for Straight Lines to be allowed to receive an education.

He isn't thinking of their welfare, of course, he frames it as concern for the male children, who aren't being taught as much as they should be at younger ages, and who, he thinks, shouldn't have to struggle to keep the truth of the world secret from their mother and sisters at such a young age. He thinks it's unnecessarily stressful to force a little kid to have to unlearn and relearn so many things, while keeping up a double life.

His solution to this problem is to allow women to be educated, as they were ages ago in history.

Onto family lineages.

In the narrator's country, the family lines of all Figures are kept careful track of for the purpose of eugenics, and this includes Straight Lines.

Lower class Figures who are really into the whole eugenics thing and excited and hopeful about giving their kids a better life will carefully pick out a Straight Line to marry who has no history of Irregularity for thousands of generations back in her family tree.

Higher class shapes, though, are lazier with their commitment to the eugenics project, since they think they're already so far ahead. They will be less careful to pick a wife with "good genes".

The narrator mentions that a Circle has been known to marry a Straight Line whose grandfather was Irregular, simply because he liked her.

The narrator blamed these "lazy" tendencies as one of the reasons that higher classes tend to have fewer children.

Since the narrator had six kids himself, it can be assumed that he went to great lengths to choose his wife based on her "good genes", and says this is why they've managed to have so many Regular kids together.

When referring to a Straight Line's family history, it is referred to as a "pedigree", exactly like a dog or a show horse, because Straight

Lines are not considered human, and referring to them like animals is a way of reinforcing that.

Straight Lines who are diagnosed with any illness that causes sudden, uncontrollable movements like seizures, chronic colds, or other diseases, are immediately murdered upon diagnosis.

In the level of status in Flatland society, after Straight Lines we have the Equilateral triangles, who were the Middle Class, and were the owners and managers of shops and stores, overseeing a workforce of Isosceles slaves.

Above the Equal-sided triangles were the Squares with four equal sides and the Pentagons with five sides. This was the only class made up of two different Configurations. They were considered “gentlemen”, and had jobs such as lawyers (like the narrator), doctors, and other high-class, well paying jobs.

Next came the Hexagons with six equal sides, who were the lowest section of the nobility class.

After this, the narrator stopped bothering to list out specific shape names, but the level of social status continued to increase with the number of sides. When you reached some unnamed point, you were



given the title of Polygon, or many-sided, and were part of the higher nobility.

The final and most powerful class were the Circles, shapes who had so many sides that it was no longer worth the effort of counting to keep track. This was also helped along by the fact that Circles were encouraged from a young age to refuse to let anyone properly measure them, so there was no real telling how many sides they actually had or didn't have. After a certain number of sides, Sight Recognition stopped being helpful, so Circles were able to keep their exact measurements a secret.

The Chief Circle was supposedly chosen because he had the most number of sides in the country, and was assumed to have ten thousand sides to be polite.

The Chief Circle was the supreme leader of all the allied countries in Flatland that the narrator knew of. Also known as a dictator.

The Circles created this system to give themselves all of the power they could get. They held all of the political offices, and controlled everything.

The “Circulararchy” is similar to both the Patriarchy of our own world, along with other systems of oppression, like white supremacy, racism, ableism, intersexism, queermisia, and more.

The Circles are called “Priests” in Flatland, but they use the word differently. They are the administrators of all businesses and government. They don’t do any work themselves, they only direct the workers on what to do.

Circles hold themselves up as the ideal human being. They tell everyone they are the smartest, the only shapes fit to rule.

They tell everyone below them that it should be their entire life’s goal to become as much like a Circle as possible.

It isn’t actually possible for a Flatlander to naturally gain sides over the course of their lifetime, but the Circles have been in power for over two thousand years, and spread constant propaganda telling people that, if you just work hard and don’t complain, and do everything in your power to uphold the Circulararchy, your efforts will someday be rewarded in your children, or your children’s children, having a larger angle than you, if you’re an Isosceles, or one more side than you, if you’re an Equilateral, and so on and so forth.

So, this propaganda said, if you just work hard enough and don't complain, maybe, eventually, someday, if you're lucky one of your descendants might be a Circle, and that will make all your suffering be worthwhile.

The narrator tells us that this generational evolution from one shape to another is just a natural law of nature, that every figure's son is guaranteed to have one more side than his father.

And then since this is just blatantly not true, he has to immediately admit that it doesn't actually apply to the Isosceles, or any other shape, for that matter.

Yes, multi-angled figures can be born with another side, or even many, in the case of "Circles", who can at times be born with 50 more sides than their father, but it's not a guarantee, and it is in no way "a law of nature".

If that were true, there wouldn't be any non-Circle shapes left, because everyone's ancestors would have become Circles long before anyone's records of history.

The fact that the propaganda is objectively untrue doesn't stop it from working, though, because as I said before and must reiterate

again: Bigotry is not actually logical. It just pretends to be to. But it's literally not.

This is a metaphor for classism. The rich tell you that if you just work hard enough, and don't complain about how little you're getting paid, then your kids can have a better life for themselves, and someday your family's name might belong to billionaires.

The Circles have invented a saying – “Attend to your configuration”, which they use to reinforce this propaganda.

This Configurationist bullcrap is used to justify enslaving the Isosceles, murdering other Irregulars, repressing Straight Lines, and elevating Figures with higher numbers of sides to better social status.

They claim that if your configuration is Irregular, then you are just inherently either violently immoral, or worthless. So they claim that an Isosceles, if not enslaved for the good of society, is just destined to go on to become a violent criminal, and that Straight Lines need to be kept in the home as much as possible, where they can't hurt anyone.

And on the other side of the coin, a Hexagon is just inherently going to be a better person than any “lesser” shape, and any time they do something wrong, well, ~obviously~ it means that something happened to temporarily change their configuration – like a sudden change of temperature, running into someone in a crowd, not exercising enough, or exercising too much, or even what kinds of food they've recently eaten.

The narrator admits that this idea is great in theory, but makes it very difficult to parent young children in reality, because when one of his Hexagonal grandsons misbehaves, and then blames it on the temperature, and insists that instead of being punished, he should be given his favorite desserts to “strengthen his Configuration”, there’s no way for the narrator to deal with this that doesn’t lead to violating the ruling of the Circles in some way.

The Circulararchy has been a problem in Flatland for as long as anyone in the Narrator’s country can remember, but the specifics of this brand Configurationism were invented several thousand years before the story takes place. Most likely exactly two thousand years ago, during the period of time known as the Color Revolt.

During this time, a Pentagon whose exact name is debated by historians, but is usually called Chromatistes, came across various

pigments to create basic colors, and figured out how to turn them into paint.

First he decorated his house, then his slaves, then his father, and his sons, and his grandsons, and finally himself.

The results were both beautiful and very convenient, because now everyone could recognize these painted figures by their colors from a distance, and could easily tell which way they were facing. No one ran into them or got in their way.

By the end of the first week, all of the triangles and squares in the town had painted themselves. A month or two later, and the 12-sided dodecagons had started painting themselves. By the time a year had passed, all but the highest nobility of the town were painted, and then the trend began spreading outward to other towns and cities, spread by the saying, "Distinction of sides is intended by Nature to imply distinction of colours". AKA, "Nature gave us sides so we would paint them".

Two generations later, everyone in the known lands of Flatland wore paint, except for Straight Lines and Circles, because it was argued that Straight Lines had "only one side", and thus, no sides, plural, and Circles also had "only one side" and therefore no sides, plural.

(If you pretend that Circles were true Circles and not just polygons with too many sides for anyone to bother counting).

The Straight Lines were made to be ashamed of their supposed lack of sides. The Circles on the other hand bragged about it.

It seemed at first glance that it would be impossible to paint a Figure that had “no sides”.

And while that was being argued with, massive social progress was unfolding.

Because anyone could simply look at use someone’s colors to tell what shape they were, it was easy for everyone to move in crowded areas without bumping into anyone, instead of the Art of Sight Recognition being given to only the rich people.

Different shapes were painted with different colors on each side, making them easy to recognize.

We do not know all the combinations, but we do know that Isosceles were painted black, purple, and orange, Equilateral triangles were red, white, and blue, and Squares were purple, dark blue, gold, and reddish brown.

For the rest of the possible shapes, you just have to make it up yourself. We just don't know.

This color-coding made it easy for everyone to learn to recognize different shapes, not just the rich people.

The Isosceles were able to use this fact, and others, to successfully argue that they deserved equal rights as everyone else, and should no longer be forced to literally be tortured to death in elementary schools to teach rich kids the Art of Feeling, since no one needed to bother with it anymore when you could just look at people instead.

The Arts of Sight Recognition and Feeling were being used less and less, because they were no longer needed. Only the Circles still practiced and trained themselves in Sight Recognition, because they refused to be painted.

But eventually people figured out that you could, in fact, paint a Straight Line and a Circle. They decided to pass a law saying that since both had no sides, then both would be painted with the same two colors: Red on their front half, and green on their back half, so that everyone could recognize them and see which direction they were facing. This bill also demanded complete equal rights for everyone, protected by law.



This was known as the Universal Color Bill.

This news delighted the Straight Lines, and horrified the Circles. Because if they were both painted the same colors, it would be so easy for someone to mistake the two.

This brought almost all of the Straight Lines over to the side of the Chromatic Innovation, as the Color Revolt was called in those days.

At least twenty-three Circles were murdered by their wives when they refused to support the proposed law that would give them equal rights.

And since the Circles desperately did not want to pass a law that would give everyone the same rights and privileges as they had, and because they knew that if they let this go on much longer they'd probably have to deal with a violent uprising instead of a peaceful protest, they had to come up with a plan to ruin the reputation of the Chromatic Innovation, and make people hate it instead.

So they made up a story about a poor orphaned Straight Line princess from a noble family, who killed herself on her wedding night after being tricked into marrying an Isosceles stalker who

painted himself like a twelve-sided Dodecagon to make himself seem like a nobleman instead of a slave.

The Circles spread this fake story and convinced everyone it was true, and used this to convince the Straight Lines that the Chromatic Innovation was dangerous for them and that they shouldn't trust anyone who was painted, because the same thing could happen to them, or to their daughters.

AKA: They convinced all the white women that they were better off being property of their husband as long as it meant that Black men were still enslaved.

Just like all the racist white women in history who've fought to uphold white supremacy even when that also means upholding the same patriarchy that oppresses them and keeps them locked into abusive marriages with no escape.

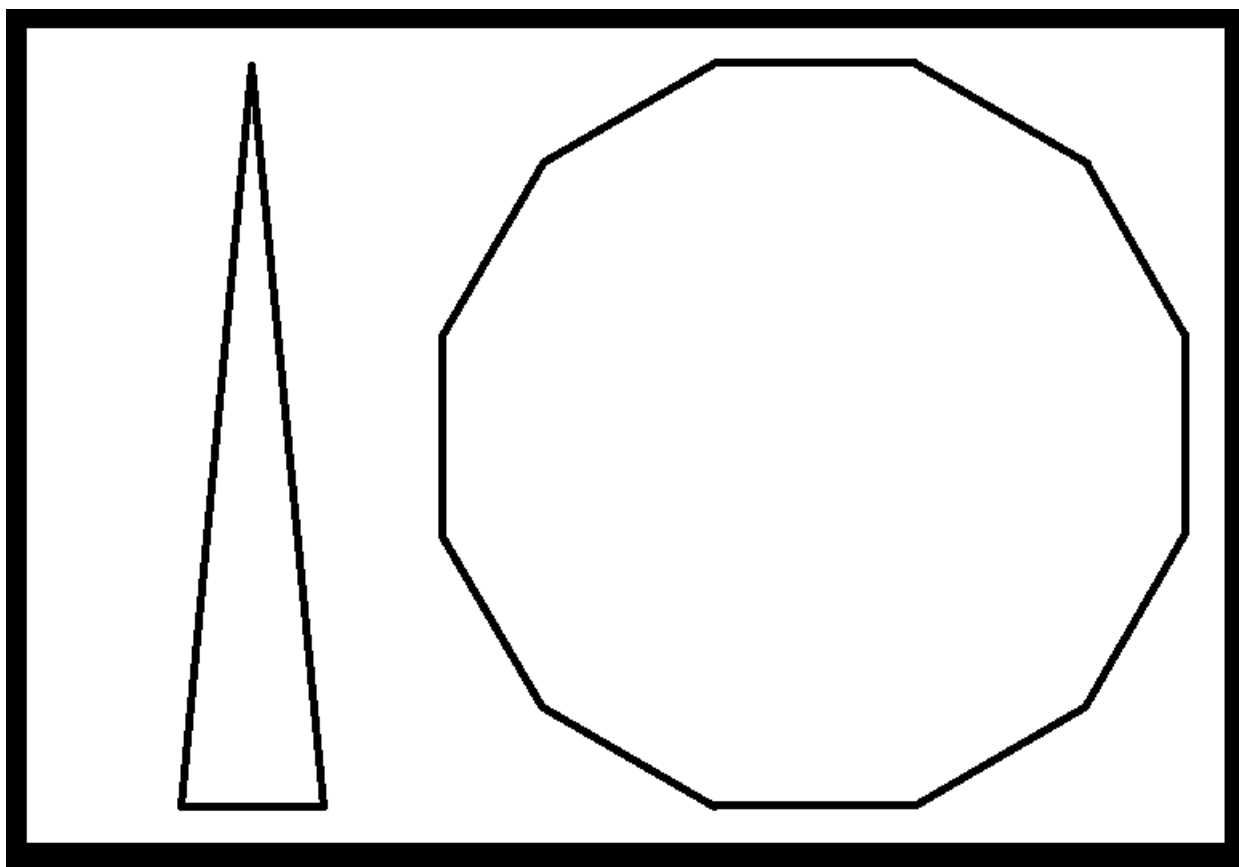
And again, please note the fact that the people who claimed an Isosceles not only figured out how to perfectly paint himself in twelve different colors in the exact pattern required to fake being a Decagon, are also the exact same people who claim Isosceles have no brains.

Imagine how difficult every single step of that plan that would be to pull off. Imagine you have only three sides, one of which is shorter than the others, and you have to figure out the Exact Pattern to paint yourself in to make you look Exactly like a Dodecagon.

And then you have to make connections with this Straight Line's family and court her through all the proper channels for months on end, without ever making a mistake, and you'd have to keep reapplying the paint and keeping up a perfect fake accent the entire time, and you can never let anyone get close enough to feel you, or even accidentally bump into you.

Think about exactly how difficult that would be. You'd have to be both a master actor, and a master painter, a trained mathematician, and have the best luck in the entire world.

Really think about how difficult it would be.



[Image description start: A thin Isosceles triangle next to a much wider, Regular thirteen-sided shape. Image description end.]

And then remember that the same people claiming an Isosceles did all these that would require an absolute master of disguise, acting, and planning, are also the exact same people who insist that Isosceles are literally brainless things that shouldn't even be considered human.

Because bigotry is not actually based in logic. It is not based in reality. And bigots know this. They know they're lying.

They will tell you in one breath that the oppressed people are all-powerful dangerous masters of disguise and cunning able to trick dozens of "inherently superior" rich people for months on end without getting caught. And then in the next they'll tell you that Isosceles are actually just completely mindless creatures only good for hard labor because they aren't even smart enough to count their own angles.

It doesn't make sense because bigotry doesn't make sense. Bigots will lie to you and insist that it does, but they're liars and they know it.

So the bigots of Flatland didn't think twice about how impossible and contradictory this story of the Circles was. They didn't care that if it was true (which it wasn't) it would mean they were completely wrong about the capabilities of Isosceles.

All they cared about was that it gave them an excuse to destroy all the strides towards equality their society had made in the last few years, as long as those who had privilege in the status quo could keep those privileges, even if it meant they'd also be losing their opportunity to get actual equal rights.

The Chief Circle of that time was known as Pantocyclus, and he called together a meeting of all the allied countries to meet and discuss the Universal Color Bill.

Hundreds of thousands showed up to the meeting, where Pantocyclus announced that the Circles had finally seen the error of their ways, and were prepared to pass the Universal Color Bill.

But first, before they signed it, he just wanted to make sure that everyone understood both the pros, and the cons of the bill.

And then he gave a speech first telling the Equilateral triangles, Squares, and Pentagons that if the Isosceles were given the same rights as them and every other shape, that all the hard work they and their families had put in for generations would all for nothing.

Then he addressed the Isosceles with the widest angles that were the closest to 60 degrees, telling them that many of them had been about to be let into the Equilateral class, and for others, their children could have been born Equilaterals. But if the lower-angled Isosceles below them were given equal rights to everyone else, then that distinction would be meaningless, and, again, all their hard work would be for nothing.

Pantocyclus told these higher status Isosceles that if the Universal Color Bill passed, then all the power in the country would go to those with the most numbers, and that would be the Criminal classes of Isosceles with the smallest angles, almost impossible to tell apart from Straight Lines.

Chromatistes tried to protest in defense of the lower class Isosceles, but was silenced by guards who forced him to remain silent. These guards were Isosceles prisoners controlled by Pantocyclus himself.

Then Pantocyclus spoke to the Straight Lines, and told them that if the Color Bill passed, no Straight Line would ever be safe again, because anyone with multiple angles could pretend to be something they weren't.

He shouted that death would be a better alternative, and this was the pre-planned signal for all of the Straight Lines — in this instance, very clear metaphors for privileged white women — to sneak up invisibly and start murdering the lowest-classed Isosceles, while Chromatistes was murdered by the same guards who had silenced him before. Every door was guarded by more of these Isosceles prisoners who now acted as assassins along the murderous Straight Lines.

All of the lower-angled Isosceles in the area were murdered. Over a hundred and forty thousand of them had attended the meeting, thinking they were finally about to be given their freedom and equal rights for the first time in their lives.

The higher-angles Isosceles were decimated, in the original meaning of the word – one in every ten was murdered, as a punishment for them all.

Every Equilateral triangle so much as suspected of any Irregularity was murdered on the spot.

Any triangles who survived the massacre spent the next several years under close monitoring by the government, with their homes being regularly raided to make sure they weren't thinking of rebelling again.

Every town and city was ransacked, and all of the members of the lower-angled Isosceles who had avoided the first massacre were rounded up and slaughtered.

The use of color was banned. Even saying a word simply referencing color was made illegal and severely punished, with only Circles and



some of the most highly trained scientific teachers allowed to use them.

There are rumors that in the most expensive courses at the most expensive collages, people sometimes use color to demonstrate complicated mathematical theories, but the narrator isn't that rich, and cannot confirm or deny the rumors.

There is exactly one factory left that produces color in all of known Flatland, owned by the Chief Circle. It is run entirely by Isosceles of the lowest angularity, and each year the workers are slaughtered, and new ones brought in, so that none of them can ever share the secret of how it is made.

It has been at least two thousand years since the Color Revolt was violently ended.

Color, and anything to do with it, is still illegal, and punishable by death.

## **Section 4: How the Narrator went to Lineland**

The narrator's story begins on the night before New Year's Eve, two days before the new year.

It is the Flatland year of 1999. In two days it will be 2000.

In terms of calendar year, you can imagine that Flatland is about 116 years "ahead" of us, though this of course is not a reflection at all on how "advanced" either of us are in comparison. Calendar years are just made up. Anyone could sit down and start considering it year 0 and it wouldn't change anything.

For the narrator, this was the first day of his long holiday vacation, and he stayed up late enjoying himself thinking about his favorite math problems. When he finally went to bed, he was still thinking about a math problem that he hadn't solved yet.

In his dream he found himself looking at a long line of people in the distance. Some of them were short Straight Lines, others appeared to be glowing Points. All of them were lined up, and moving from left to right, making chirping noises like crickets. Some times they all stopped moving, and when they stopped, the noises stopped too.

In the “center” of this line were Straight Lines, and on the "edges" of it, as far as the narrator could see, were Points, which he'd never seen behaving like people before, but, since this was a dream, he didn't question any of it.

In the very “center” of the moving line of people was the longest Straight Line the narrator could see anywhere nearby, though he still considered the length to be short compared to the Straight Lines he was familiar with; more like a young girl than an adult woman.

He decided to approach this Straight Line, asking “her” why everyone was standing in a line, making chirping noises and moving from left to right like that.

He asked three times without getting any answer, getting more annoyed each time, thinking the “woman” was just ignoring him to be rude.

Finally he shoved himself forward, putting his face in front of “her” to stop “her” from moving forward again, and repeated himself again, now very angry and offended.

To his surprise the line replied that he wasn't a woman, he was the King of Lineland, and where in the world had the narrator suddenly appeared from?

The narrator attempted to explain that he'd simply approached from the side, but the King of Lineland didn't believe him.

This was the realm of the First Dimension, or Lineland, consisting of only a single line that ran from East to West, with no concept of North or South. The only movements possible for Linelanders were from Left to Right, or West to East, along that single line.

You can imagine Lineland as being very long, but only a single pixel wide.

In Lineland, we are told that there are two shapes people can take: Straight Lines, which were were classified as Men, and Points, which were classified as Women.

Straight Lines like the King had two pairs of eye-mouths, one on either end, each with a different voice. Points had only one voice each, though we are not explicitly told that they have only one eye-mouth.

We are told that two (2) Points and one (1) Straight Line are required to produce children, which was done through singing once a week until all four of their voices (One voice for each Point, two for the Straight Line) perfectly harmonized, which always created two new Points and one new Straight Line.

It usually took years of practice to harmonize with partners, and when this finally happened, the three became officially married.

Because Linelanders existed only in a single straight line which you can imagine one pixel wide, and took up all of the single-pixel width of that line, they could not move or see past one another.

To work around this, their sense of hearing was extremely sensitive and well-trained, allowing them to quickly calculate distances and shapes based on sound alone, similar to echolocation.

The King of Lineland demonstrated this by calling out to his two wives, who were both over six thousand miles away from him on either side, and they called back.

Using the time that it took for his voice closest to reach them versus the voice further away, his wives could tell that he had a total length of 6.457 inches, and called this answer back to him.

This is the Lineland method for recognizing other shapes, in place of both Sight Recognition and the Art of Feeling.

Sight Recognition would be useless in Lineland, because you can only ever see two people in your whole life – whoever was born next to you on either side. And even with those two people, you can only ever see them as a Point, or if it's easier to imagine, a pixel.

(Notice how this is one dimension lower than the straight lines that a Flatlander sees everything as. A Flatlander sees everything as a line, and a Linelander sees everything as a point.)

The Art of Feeling would also be useless in Lineland, because again, a Linelander would only ever be able to use it on their two immediate neighbors to the left and right, and when you literally spend your whole life next to the same two people, they're not exactly strangers.

The King of Lineland also tells us that the act of touching another is illegal in Lineland because Points are supposedly extremely fragile, and could be accidentally killed by running into someone else, and since it's impossible for a Linelander to see the difference between anyone, because everyone looks like the exact same single point or

pixel, it is illegal for anyone to touch another altogether, to prevent accidental deaths.

The King of Lineland at one point says that he thinks the narrator's some kind of mutant woman, because he only has one voice, and does not believe the narrator at all when tries to argue, and explain that he's a Square.

Because the King of Lineland can only see a point, and can only imagine a Straight Line, he has no clue what a "square" is supposed to be, and does not believe the narrator when he says he's from the Second Dimension.

He does not believe that there is more to space than the simple Straight Line he can imagine.

So the narrator attempts to prove the existence of the Second Dimension.

First he attempts this by telling the narrator all of the people that he could see before he entered Lineland itself, and lists them out in order. The King scoffs at this, because it doesn't prove anything; anyone in Lineland could get this information in half a second just by listening – and the narrator had to have hallucinated that he'd

seen people, because it was impossible to see the difference between a point and a line. No, it was either a lie, or a dream. Either way, it proved nothing.

So the narrator tried again, this time by slowly moving himself backwards out of Lineland, trying to show that he was moving Southward, until he was outside of Lineland altogether.

But this didn't work, because Lineland is so thin that there was no way for the narrator to be partly in it. He was either inside of Lineland, or he wasn't.

You can't have half of a pixel, there will either be a pixel, or there won't be. A 2D figure will either be inside of Lineland, or it won't be.

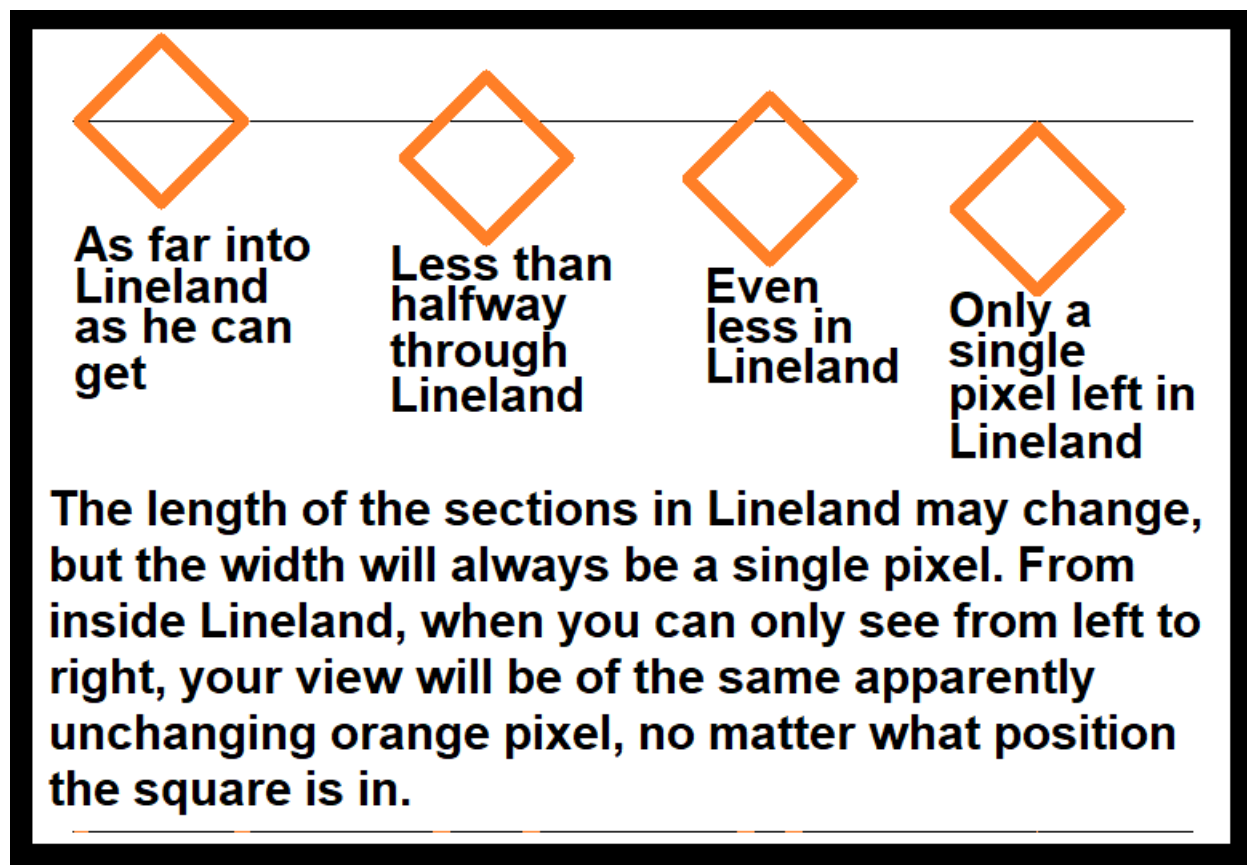
Imagine you lived inside that pixel-wide line. All you can see, when you look to the left or the right, is a single pixel.

Now imagine that there is an orange square intersecting that line. What do you see when you look at him?

You just see a single orange pixel. No matter what position he's in, or how far in or out of Lineland he is, or if he's spinning circles, you



will only ever see him as a single orange pixel, sometimes moving closer to you, sometimes further away.



[Image description start. A diagram where the Square narrator is represented by an orange square, facing one point towards Lineland, which is a very thin black line only a single pixel tall. First we see the narrator “As far into Lineland as he can get”, with Lineland intersecting his middle. Next he is “Less than halfway through Lineland”, then “Even less in Lineland,”, then finally, “Only a single pixel left in Lineland”. Text below reads, “The length of the sections in Lineland may change, but the width will always be a single pixel. From inside Lineland, when you can only see from left to right, your view will be of the same apparently unchanging orange pixel, no

matter what position the square is in.” At the very bottom is the black line of Lineland again, showing pixel-tall sections of orange where the Square intersects, but not showing anything outside of it.

Image description end.]

The only thing the King saw was the narrator suddenly seeming to vanish. He saw no movement at all, just one moment “she” was there, and then “she” was gone. (The King kept up insisting that the narrator was actually some sort of mutant woman despite his protests).

The narrator spent probably half of this conversation purposefully antagonizing the King out of spite, and eventually gave up all pretense of civility, and just started, pun intended, flat out insulting the King, saying that the so-called King could only see a Point and imagine a line, but he, the narrator, could see a line for real, and imagine figures.

He went on this whole rant about how the King was worthless compared to him, and especially compared to any higher class Figures in Flatland, and that he’d come here intending to teach him some common sense from a higher being to a lesser one.

(We can assume that he said he'd come to Lineland on purpose because he was dreaming, and sometimes dreams are just like that. You think, do, or say things that don't make sense, but feel perfectly natural while you're dreaming.)

The King's reaction to this insult was to attempt to kill the narrator by charging at him to stab him to death, while the rest of his subjects gave a deafeningly loud battle cry that literally froze the narrator in place.

Right before the King hit him, the narrator woke up, and found himself in normal Flatland once again.

## **Section 5: How the Narrator met the Sphere, and was brought to the Third Dimension**

Now the story skips ahead to the next night, New Year's Eve.

It's late at night, and the narrator tells us that the only ones still awake in the house are him, his wife, and the youngest grandson, a Hexagon.

We're told that earlier, the narrator and his adult sons had started teaching this young hexagon the basics of Sight Recognition, and because he was so talented at it, the narrator decided to reward him by letting him stay up late to give him a special private lesson on geometry.

(The narrator is a lawyer who does math purely for the fun of it, so he saw this as a very cool reward)

He explains to his grandson the basics of geometry, showing him with small toy squares that if you take nine squares who are each 1 inch by one inch, and stack them in three rows to create a larger square, then, even though you couldn't see the inside of the square, you could calculate the total amount of space it took up by "squaring" the length of a single side.

Because the smaller toy squares were 1 inch by 1 inch, each side of this square was 3 inches.

It was then possible to calculate how much total space the square took up by taking 3, the length of the side, to the 2nd power, which meant doing  $3 \times 3$ , which equals nine.

This showed that the square took up 9 square inches of space.

Do you see the parallel with the Linelanders singing to calculate how much space one of them takes up? Flatlanders cannot see a square, but they can calculate and imagine it. The same way Linelanders cannot see a line, but they can calculate and imagine it.

His grandson thought about this information for a little while, and then told him that it was clear he was planning to teach him how to raise things to the third power, which clearly meant something in geometry, so what did that mean?

The narrator responded that it didn't mean anything, because there were only two dimensions in geometry – so he explained the basics of geometry to make sure his grandson understood:

First you have a point, with zero dimensions.

Then you move that point parallel to itself, and get a line, which has one dimension. This can be represented by 3.

Then you move that line parallel to itself, and you get a square, with two dimensions. This can be represented by  $3^2$ , or three squared—

This time his grandson suddenly exclaimed that this obviously meant that the next step would be to somehow move a square parallel to itself, to create some shape he didn't know the name of, which would be represented by  $3^3$ ! (or three to the third power).

The narrator angrily told him to go to bed, saying that he was speaking nonsense.

His grandson sadly went off to his room.

Then the narrator sat up in the living room with his wife, still annoyed by what he thought was his grandson's foolishness wasting his time when he'd been trying to teach him about his favorite subject.

He complained about this out loud to his wife in frustration – and immediately felt a cold chill sweep through him, and sensed a

Presence™ in the room, though when he stood up and looked around, he couldn't see anything.

Creeped out and trying not to show it, he said again that his grandson was a fool, because 3 to the third power meant nothing in geometry!

And a voice from nowhere replied that his grandson was not a fool, and 3 to the third power had a very obvious meaning in geometry.

The narrator and his wife both leapt to their feet, and were shocked to see a stranger suddenly appear before them, as if from nowhere.

Because they were in their dry living room, there was no fog, so the stranger before them appeared as simply a white line, with no gradient. But strangely, that white line seemed to be growing smaller and larger with every passing moment, in a way the narrator had never seen before.

The narrator's wife thought the stranger was a woman who had somehow gotten into their house, and when the narrator tried to argue that he thought the stranger might be a Circle, his wife insisted that Feeling was more trustworthy than Sight Recognition, and approached the stranger to Feel what kind of shape they were.

To her shock, it wasn't a Straight Line at all – it seemed to be a Circle, but with no sides that she could feel, not even tiny ones. Horrified at how rude she'd been, she wondered aloud if she could have just dishonored a Perfect Circle, something unheard of.

The stranger replied that they could be considered a Circle in a certain sense of the word, and they were definitely a more Perfect Circle than anyone in Flatland could ever be, but to be more accurate, they were many Circles in one.

Then they politely asked the narrator's wife if they could borrow her husband for a few minutes to speak privately in another room — but the narrator's wife was so flustered and embarrassed at the thought of forcing a Perfect Circle to leave the room just for her sake that she backed out of the room herself, apologizing many times and saying it was way past her bedtime.

This left the narrator and the stranger alone together. When the narrator checked the time, he realized it was now past midnight, which meant it was now officially the year 2000.

Alone together, the narrator intended to approach the stranger and ask them to be seated, but he found himself frozen in place with fear. He could only see the stranger as a straight line, with no gradient to



show any angles, but still the shape and size of the stranger was changing with every passing moment, in a way no Regular shape should be able to move.

Suddenly afraid that the stranger was some kind of mutated Irregular burglar, he rushed forward to Feel them...

And was shocked when what his wife had said was true – he couldn't feel a single angle or side, not one. The stranger seemed to really be a Perfect Circle. He ran full around them, just to be sure there was no mistake. And there was none.

After spending several minutes apologizing for being so rude, he asked the stranger where they'd appeared from.

And the stranger replied that they'd come from space.

Which confused the narrator, because weren't they in space right in his living room? So saying you'd come from space was meaningless.

The stranger scoffed, and said the narrator had no idea what space really was, and asked him to define it.

The narrator replied that space was length and width, stretching on forever.

The stranger told him that he was wrong, he was here to tell him that there were really three dimensions – length, width, and height.

The narrator responded that he also sometimes used the word “height” interchangeably with “length”, and sometimes said “breadth”, or “thickness” instead of “width”, so he already knew multiple words to describe the two dimensions.

This wasn’t what the stranger meant, obviously, so they tried again to explain that when they said “height”, they didn’t just mean “length” by another name, they meant something else entirely — A different dimension, both up and down.

They’d come from above, from “Upwards, not Northwards”.

None of this made sense to the narrator, who asked the stranger to show him which way was “up”. But the stranger told him that he would need to have an eye on his side in order to see upwards.

The narrator was offended, and pointed out that he did have a perfectly good eye on one of his points.

The stranger specified that they didn’t mean one of his edges, they meant his side – or, as he thought if it, his insides.

The narrator thought this had to be a joke, but the stranger insisted that from “above”, in the Land of Three Dimensions, they could look down and see inside of all the things the narrator considered solid.

They listed out the occupants of the narrator’s house in an attempt to prove this to him, explaining where everyone in the house was, and what they’d been doing just before they came down into Flatland.

The narrator responded that this didn’t prove anything, because they could have just asked any of his neighbors for that kind of information and gotten it easily, especially if they were a Perfect Circle like the stranger seemed to be. It’s not like any of it was a secret.

So the stranger tried something new and asked him how many dimensions he thought he was seeing when he looked at a Straight Line.

Their intention was to get him to say three, because the line had to be long, and wide, and tall, in order to be visible. If it had only length and width, but no height, you wouldn’t be able to see it from the side, and it wouldn’t really exist.

But the narrator told them that he knew that Straight Lines were really just very thin parallelograms, so the trick question wasn't going to work on him – he knew that Straight Lines existed in two dimensions just like everyone else.

The narrator asked the stranger if they were calling brightness “height” and saying it was a dimension, because yes, if you took away a line's brightness, then you wouldn't be able to see it any more, and if a line stopped glowing, it meant she was dead, so in that way she wouldn't exist anymore.

Again the stranger told him this wasn't what they were talking about. They didn't mean brightness, they meant height.

The narrator said that if height really existed as a third dimension, then it should be easy to prove. All they had to do was demonstrate which way it went. And if they couldn't do that, then they didn't have the right to be upset with him for not believing it. He asked them to measure his height to prove it existed.

But the stranger couldn't measure the narrator or physically point out to him the direction they meant, so they tried to demonstrate it themselves, by slowly lifting themselves out of Flatland, to prove, through their movement, the direction of upwards.

First they explained that because they were a 3D Solid instead of a 2D figure, they couldn't fit all of themselves into Flatland at once, only a single cross-section at a time. They were a Sphere, which meant that each of their cross-sections in Flatland appeared to be a perfect Circle.

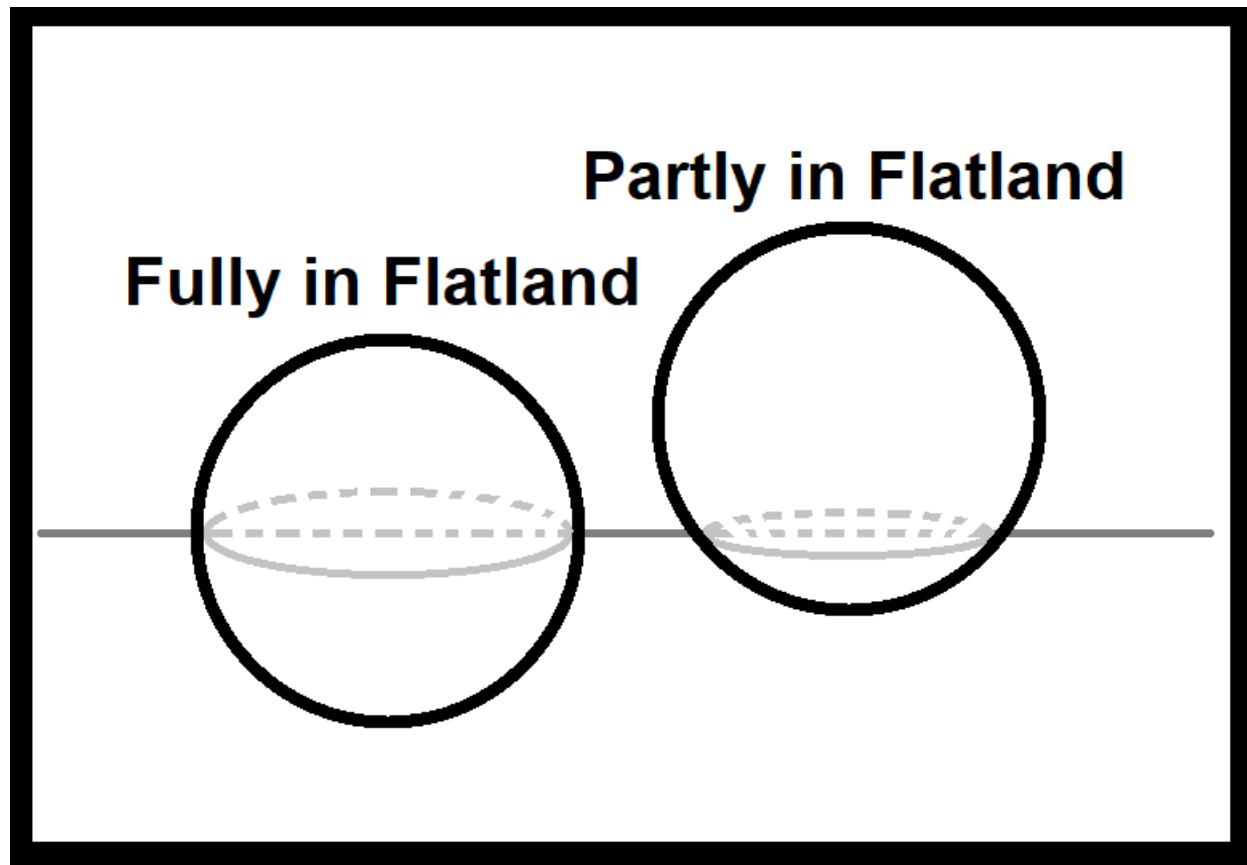
The narrator didn't believe any of this, but the stranger insisted he just wait – they would show him. He might not be able to see their whole body in 2D, but he would be able to see their circular sections growing smaller as they lifted themselves out of Flatland. All he had to do was watch.

And while the narrator watched, the Sphere lifted themselves slowly out of Flatland, sure that this would prove the existence of the Third Dimension.

But the only thing the narrator could see was that the stranger appeared to be shrinking, until finally they disappeared.

Like the King of Lineland, he didn't see any evidence of the stranger moving out of space as he knew it, they just seemed to be pulling some sort of party trick.

The Sphere, from above, asked the narrator if he believed them yet. He did not. So the Sphere came slowly back down, their sections expanding this time rather than contracting.



[Image description start. A diagram showing the sphere intersecting a thin black line that represents Flatland, first “Fully in Flatland”, with grey dotted lines inside to show the circular cross section visible to Flatlanders, then they lift up so they are only partly in Flatland, with a smaller circular cross section visible. End image description.]

The narrator was now convinced that the stranger wasn't a Circle at all, but some sort of stage magician pulling tricks.

It was either that, or the old wives' tales were true, and there were such things as tricksters who could use real magic.

The Sphere, on the verge of giving up entirely, decided to try one last approach: Analogy.

They explained that a point, moving parallel to itself, became a line. The line had two "terminal points".

That same line, moving parallel to itself, then became a square, with four "terminal points".

A line could be described as having two sides, and a square had four.

The Sphere said, Zero, two, four. And what kind of progression do you call that?

The narrator replied that it was a mathematical one.

And what number came next?

Six.

The Sphere was pleased, sure that now the narrator would understand that, purely by following the analogy, the square in the

example would move parallel to itself, creating a new shape with eight sides and eight terminal points.

Surely, it was obvious? Surely this would prove that everything they'd said was true?

Nope.

The narrator charged them and attempted to kill them.

But they managed to slip upward and away to safety, and then told the narrator they would prove it to him for sure this time – by going to one of his cupboards from above, and removing one of the books. He would see that the door didn't open, and was still locked, because he still had the key. From above, the things the narrator thought were “solid” were open to the Sphere for the taking.

The Sphere narrated as they went above a cupboard and took one of the books out, while the narrator, in horror, ran to open the cupboard to see for himself. Behind him, the Sphere reappeared, and the book appeared on the floor in front of them.

The narrator was now terrified that he was losing his mind.



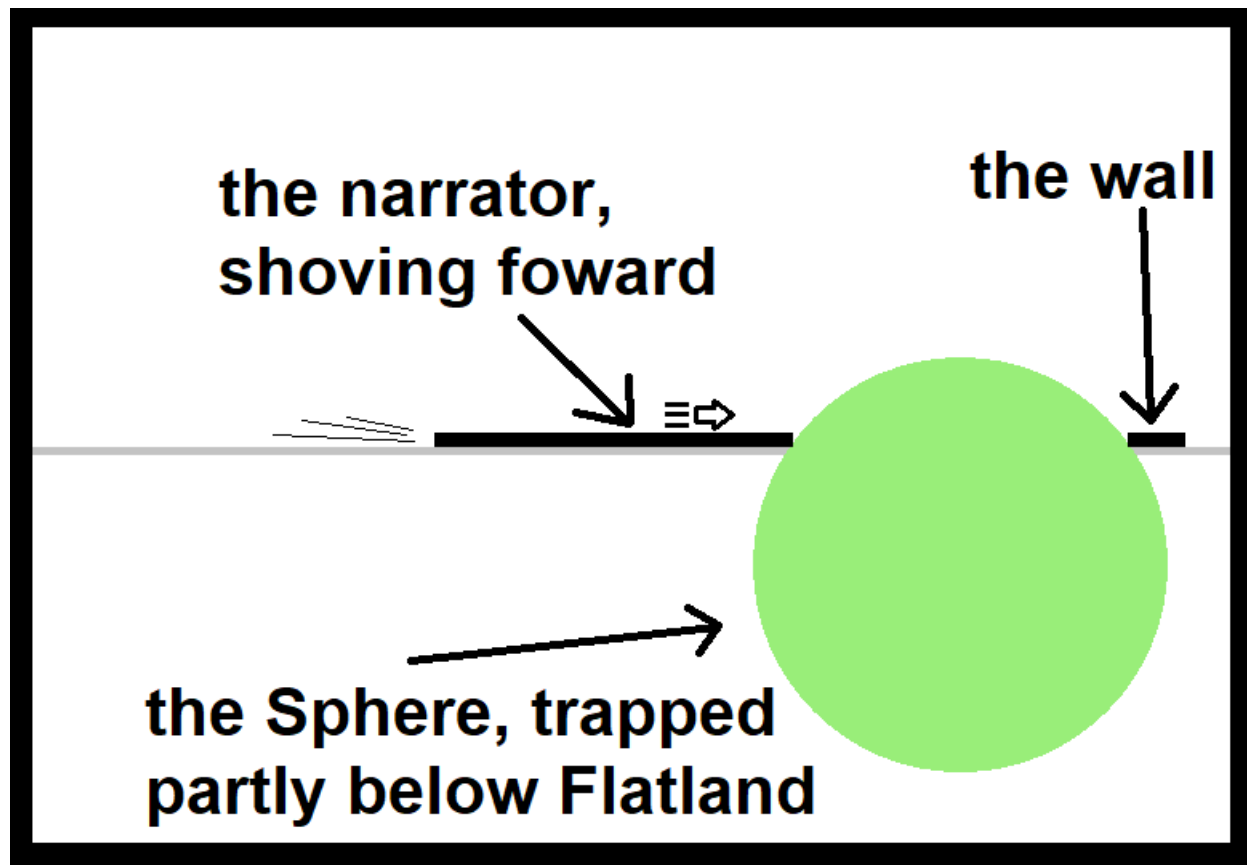
The Sphere lifted back up out of Flatland, and kept moving higher, voice growing fainter, and told the narrator that they could see all of the surrounding neighborhood – a theater ten houses away, the people leaving it, and even a Circle sitting in his home on the other side of the theater. Then the Sphere began to come closer again, and reiterated that they could even see inside the narrator's own body.

In fact, the Sphere decided to poke the narrator, gently, in his stomach, just to prove that they weren't lying, saying that the moment of pain it would cause would be worth it in return for the knowledge it would bring him.

The Sphere touched the narrator on his insides, which caused the narrator a shooting pain that lasted a moment, before fading to a dull ache. The Sphere laughed, and then began to lower themselves back into Flatland, saying that if the narrator wasn't convinced by that, then they didn't know what would convince him.

The narrator hesitated for a moment, and then charged again with intent to kill, and this time managed to ram them against a wall, while yelling loudly for everyone else to wake up and help him deal with the intruder.

The Sphere had fallen slightly too far into Flatland this time, sinking partly below the surface, and with the wall above and behind them, and the narrator shoving them into it, they couldn't escape without drastic measures.



[Image description start. An MS Paint diagram with a thin grey line going horizontally across the center. There is a pale green circle almost fully below the grey line, and above it holding it in place are two black lines, one larger one labeled, “The narrator, shoving forward”, with arrows to show the aggressive movement. On the other side is a smaller line labeled, “the wall”. The circle is labeled, “The Sphere, trapped partly below Flatland”. End image description.]

They didn't want any of the narrator's family to learn about the secrets of the Third Dimension, so tried to convince the narrator to let them go before his wife entered the room and saw what was happening, but the narrator refused.

They begged him to let go, but without success. Finally they warned him that unless he let them go, he would have to come with them, because they couldn't stay here and let his wife see them like this.

The narrator refused to let them go, so they had no choice but to surge upward and out of Flatland – knocking the narrator up into space along with them.

## Section 6: In Spaceland

At first the narrator couldn't understand what he was seeing, and thought he'd either gone insane, or was in hell. The Sphere told him that neither was true, he just needed to calm down, and open his eye again and try to look again.

And when he opened his eye again, he was looking down on Flatland, just as the Sphere had described. He could see into every house, every box and cabinet in that house, and see all the people, and inside them too. He was in the Third Dimension — in Spaceland.

When he looked at the Sphere, he thought he was looking at their inside, because from the new angle, he could see all of them, and they appeared as a Circle like he'd imagined, but he couldn't see their insides. Instead, he saw their solid, spherical surface, which was something he'd never conceived of before.

He'd been imagining the Sphere as a strange kind of Circle, and still didn't understand why this was happening. So he asked why he couldn't see their internal organs, if he was looking at their inside?

The Sphere explained that he wasn't actually seeing their inside. If they were a Circle, he would be able to, but they were a 3D Sphere, a Solid, and their insides couldn't be seen the way a Flatlander's could be.

The narrator didn't understand anything the Sphere was saying, but instead of being annoyed by it, was now happy to just float there and adore them.

The Sphere reassured him that it was okay if he didn't immediately understand, since he had a lot to learn. For now, they were going to look at Flatland.

The Sphere showed the narrator his own house as seen from above, where his wife was still awake, looking for him in worry.

The narrator wanted to go back down to reassure her that he was safe, but the Sphere told him that she wouldn't have to worry for long, and for now he had a lot to learn.

The Sphere lifted him higher above Flatland, and began to fly away from the narrator's house.

An hour passed, and during this time the narrator exclaimed that he'd been given the powers of a god, because he could see so much.

The Sphere told him that was a ridiculous idea, because everyone from the Third Dimension could see this much all the time, including murderers and thieves.

The narrator asked if that meant that the power to see everything, which he called "omnividence" was a power given to people besides Gods.

The Sphere replied that they didn't know, but if even murderers and thieves could see all of Flatland, then that obviously wasn't a good enough reason to treat them as Gods.

They pointed out that being able to see so much didn't make you more kind, or compassionate, or loving, so how, exactly, did it make you more like a God?

The narrator was shocked by this, because kindness, compassion, and love were things the Circles attributed to women as insults, they weren't supposed to be traits anyone worthy of respect would have! Clearly, knowledge and wisdom were more important than caring about people!

When he told them this, the Sphere told him that it wasn't their place to tell him what kind of people he should respect, but the people of the Third Dimension that he wanted to worship so much were much more like the Straight Lines of Flatland than their Circles.

The Sphere changed the subject, pointing out a large building they were approaching. This was the General Assembly Hall where the leaders of the allied countries of Flatland met.

The Sphere began to lower them both down towards this Hall, and the narrator realized that it was now one o'clock in the morning.

The highest Circles of the states were meeting, following a tradition several thousand years old. On the newest millenium, or every thousand years, they would hold this same meeting.

The scribe for the meeting was someone the narrator recognized – it was his own brother.

While the narrator and the Sphere hovered above, the narrator's brother read out the agreement that the highest Circles of the last meeting had come to, stating that every thousand years, many people would suddenly claim to have met visitors from another world, and

would cause chaos in the streets as they claimed to be able to prove the existence of another world.

The highest Circles had decided to punish anyone found making such claims, based on their shape:

Isosceles would be killed immediately.

Equilaterals would be whipped, and then imprisoned for life.

Any Square or Pentagon would be sent to an asylum.

Anyone of higher rank would be arrested, and immediately brought to this same council for personal judgment.

The Sphere warned the narrator that this would be his fate when he was returned to Flatland. The only reward for the Apostle of the Three Dimensions would be imprisonment or death.

The narrator wasn't worried though, he thought he understood it so well that if the Sphere would just let him go down now he could convince all of them. He tried to move to do so, but the Sphere held him in place in some mysterious way, and said it wasn't his turn to preach yet.



Instead, the Sphere went down by themselves, appearing to the Circles, and the narrator's brother, as a Circle that grew and shrank in size. They declared that they were there to proclaim the truth of the Three Dimensions, and then came back above again.

The younger Circles in the council were afraid, but the Chief Circle assured them that this had been expected, because he had the secret records of the first Millennial meetings. Everything was going as expected – they should just, obviously, not tell anyone else what they'd seen.

Then he summoned his own personal guards from outside, and ordered them to first arrest, and then kill the Isosceles guards that had been in the room, to prevent them from sharing the secret of the Sphere's appearance with anyone.

Then the Circles agreed to pass the law forbidding speaking of the Third Dimension again, and went home to enjoy their holiday.

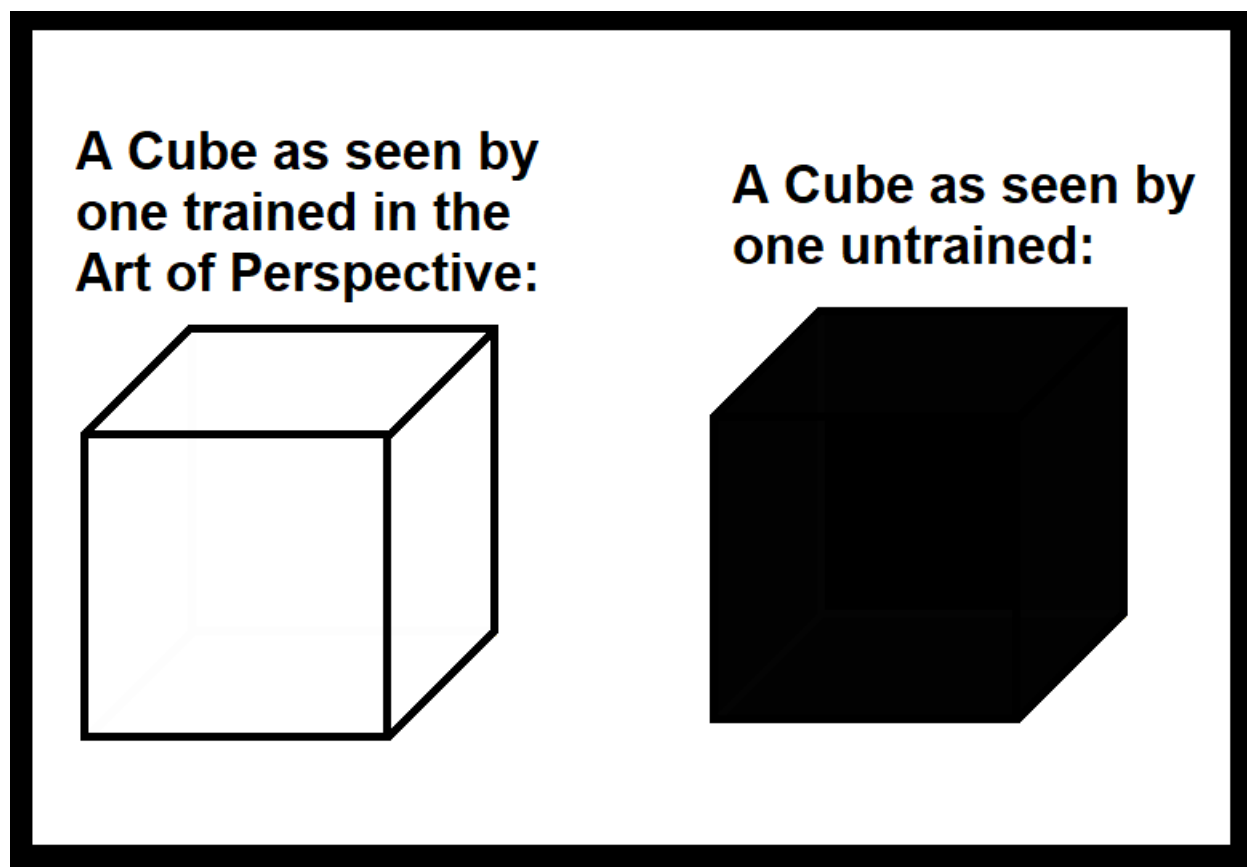
The narrator's brother was told that because he'd witnessed the Sphere's visit, he would also be arrested, but as long as he kept his mouth shut and behaved well, he would be allowed to stay alive, living out the rest of his life in a jail cell.

The narrator wanted to rescue his brother, or at least say goodbye, but the Sphere stopped him, sadly, and said that soon enough they'd probably have all the time in the world to speak.

The Sphere lifted the narrator back up above Flatland, and began the flight back to the narrator's house.

The Sphere then taught the narrator how to tell the difference between 2D Figures, and 3D Solids. They demonstrate this using a stack of square cards, slowly stacking on on top of the other to reinforce the idea of "upwards" and "above", and showing the narrator how, by stacking the square cards one on top of the other, they built up a Solid, that, when all the cards were used, formed a Cube.

Because he'd only ever seen anything in Flatland, the narrator started out not noticing or understanding shading and lighting, so when he looked at the Cube made of cards, he at first saw it as an Irregular Hexagon Flatlander seen from above, the same way he'd confused the Sphere for a flat Circle when he first saw them in 3D.



[Image description start: Two images, the first is a white cube with black outlines, labeled, “A Cube as seen by one trained in the Art of Perspective”. Next to this is the same cube now colored in solid black, so that looks like an irregular, stretched out octagon, labeled, “A Cube as seen by one untrained:”. Image description end.]

The Sphere taught the narrator how to understand perspective, using movable lights and allowing the narrator to feel around the sides of both the cubical card stack, and their own spherical body, until he could easily tell the difference between a Sphere and a Circle, a 3D Solid and a 2D Figure.

The Sphere would have then taught him about other regular 3D shapes like pyramids, cones, cylinders, but the narrator interrupted him, saying that he was ready now to see the Sphere's insides.

The Sphere was, understandably, bewildered, and asked what he meant.

The narrator explained that it was clear from everything the Sphere had taught him so far that they were preparing him to learn about the Fourth Dimension, the obvious next step in the analogy, where they would go beyond the Third Dimension, and look down and be able to see the insides of all the 3D Solids he had just learned about. He wanted to skip past other information about the Third Dimension, and go right to the Fourth.

The Sphere told him that was ridiculous, there was no such place.

The two argued back and forth, with the narrator insisting that it was clear from the analogy the Sphere had originally used on him, that there was a next step in the pattern: 0, 2, 4, 8, 16. In a Fourth Dimension, you would, according to the analogy, be able to find a shape with 16 points.

The narrator went back over the analogy from the start, insisting that it clearly continued into a dimension beyond the Third.

He argued that if his logic was correct, then the Sphere needed to admit that and show him the Fourth Dimension already — but if he turned out to be wrong, he would drop the subject and never annoy them with it again.

He asked the Sphere if people of Spaceland had ever reported visits from other worlds, or claimed to be able to see inside things, the same way Flatlanders who had been visited by Spacelanders did.

The Sphere admitted that yes, people did claim that, but they were never able to provide proof, and they didn't all say the same things. And none of them claimed to have visited the Fourth Dimension.

The Sphere tried to tell the narrator to drop the subject and stop wasting time, because there were still things he needed to be taught about the Third Dimension, but the narrator got caught up in his imagination, and went on a rambling tirade about how they would visit the Fourth Dimension, and then the Fifth, and the Sixth, and the Seventh, and the Eighth—

This went on for a very long time, and a massive paragraph. The Sphere tried multiple times to shut the narrator up, but he was too caught up in the excitement, and didn't hear them.

Finally the Sphere could take it no more, and without another word sent the narrator falling back to Flatland with a crash that he felt both inside him and out.

He fell downwards towards his house in Flatland, and got a final glimpse of his world from above.

Then there was darkness, and a crash like thunder, and when he regained awareness, he was back in Flatland, in his study room, hearing his wife approaching with her Peace-cry.

## **Section 7: The return to Flatland, and the second visit from the Sphere**

The narrator decided that he couldn't tell his wife what had happened, because it wouldn't make any sense to her at all, since she didn't even know enough math to count to four.

So he lied to her, and told her that he'd fainted and fallen into the cellar on the southern half of the house, and lain there all night.

His wife wasn't very convinced by this story, but didn't argue, just said that he seemed sick, so he should go to sleep and get some rest.

He was happy to do so, and went to his bed to sleep. Before he fell asleep, he repeated the phrase, "Upwards, not Northwards" to himself, and tried to imagine again the cube he'd seen. He was already starting to be less sure than he had been.

But he fell asleep quickly, and he dreamt.

He was back with the Sphere again, who glowed so brightly that he knew they weren't upset with him anymore, and had completely forgiven him.

The Sphere was showing him the way through a dark, silent area, towards a bright but impossibly tiny Point of light. As they got closer, the narrator heard a quiet voice speaking to itself.

The Sphere explained that the narrator had spent his whole life in Flatland's 2D, he'd visited the 1D Lineland, and had been brought by the Sphere into the 3D Spaceland. This would be his last lesson in the Dimensions: 0D, Pointland, the land of Nothing, the Land of Zero Dimensions.

The Sphere explained that the tiny Point of light in front of them was a person like they were, but a being of Zero Dimensions, with no length, width, or height. It didn't know that anything existed in the world outside of its own mind, and was completely happy with this arrangement, since it didn't know anything else.

This was the narrator's final lesson: To never be happy in ignorance, and to always strive to learn more and know more about the world.

The Sphere told the narrator to listen, and when the Sphere stopped talking, the quiet voice the narrator had heard before started speaking again, referring to itself in the third person as "It", saying happily that it was the only thing in the world and that this was beautiful.



The Sphere explained that the Point referred to itself in the third person because it was too simple to even be aware of the concept of More Than One. It was the only thing in the world as far as it was concerned. Anything it heard them say, it would assume it had thought itself, because it couldn't tell the difference between its thoughts and what they said.

The Sphere told the narrator to try telling the Monarch of Pointland that it wasn't the only thing in the world, to see for himself.

The narrator immediately began insulting it, saying that it thought it was the greatest thing in existence, but it was really nothing, because it was only a tiny fraction of a line, and a line was just a shadow of how magnificent a square was—

—and the Sphere told him that was enough, and to listen again.

The Monarch of Pointland still couldn't tell the difference between itself and the narrator's words to it, and actually thought that the insults and concepts it had just heard had been a random spark of creativity, which it congratulated itself for.

The Sphere told the narrator that there was nothing either of them could do to convince the Point that it wasn't alone in the universe,

and then they floated gently back up towards Flatland, with the Sphere once more reminding the narrator to always strive for knowledge, and never become complacent in happy ignorance.

As they went, the Sphere apologized for being angry with the narrator when he'd asked about the Fourth Dimension, and explained that they had been taught their own lessons, and they weren't too proud to admit they'd been wrong to their student.

Then they taught the narrator how a 3D Cube, moving parallel to itself, created a 4D Extra-Solid with 16 points, and that that Extra-Solid, moving parallel to itself, created a 5D Double Extra-Solid with 32 points.

All of it Strictly According to Analogy, and so simply done that even the narrator's wife would have been able to understand it.

## **Section 8: The narrator's attempts to teach his grandson about the Third Dimension, and what happened after that**

When the narrator next woke up, he was filled with joy and excitement, ready to tell the world about the Third Dimension. He would teach everyone, even the Straight Lines and the Isosceles. Everyone deserved to know the truth of their world!

He decided he would start with his wife.

But then he heard a voice outside announcing the law the Circles had re-passed the night before, demanding the execution or arrest of anyone who claimed to have been given knowledge of other worlds.

This dampened his spirits, since he knew that if he was found out, he wouldn't be able to avoid the punishment of death or life imprisonment.

His wife came into the room, and they shared some casual small talk, but he decided he wouldn't tell her first after all.

He needed to figure out some way to physically demonstrate the existence of the Third Dimension, hoping that if he could simply

show people without too many words, he could weasel his way out of obviously breaking the law. He decided that the phrase, “Upwards, but not Northwards”, would be his basic guideline.

He thought about who he would try to teach first. He decided that his sons would probably just turn him in immediately, but why not his grandson, who’d come up with the idea of the Third Dimension all on his own, just the night before?

It seemed like a perfect plan. He reasoned that his grandson was just a small child, so he wouldn’t know anything about the new law, and wouldn’t bother telling anyone.

The narrator had his grandson come to his study, and locked the door.

He went over the traditional 2D geometry like he had the night before, but when he got to the part after a line makes a square, he attempted to casually, but actually very awkwardly and nervously, ask his grandson to repeat what he’d said the night before, about the Third Dimension, and “Upwards, not Northwards”.

But before his grandson could respond, the herald outside came around again and once again announced the new law, and the crimes and the punishment for anyone caught doing it.

And the narrator's grandson, who he'd thought of as simply a young child who was too young to know anything about anything, listened in silence until the sound of the herald faded away.

Then the little Hexagon burst into tears, begging his grandfather not to turn him in, because no one had known about the new law last night, and he'd just been joking and being silly, and he was sure he'd never said anything about a Third Dimension, or said the words, "Upwards, not Northwards", those were ridiculous ideas, and only a little baby would believe them, and he wasn't a baby.

The narrator's grandson thought he was in trouble for what he'd said the night before, and that his grandfather was trying to trick him into repeating it to prove he'd broken the new law. He thought his grandfather was going to send him to jail.

The narrator got angry, and insisted that the idea of the Third Dimension wasn't ridiculous at all, and picked up one of the toy squares, attempting, and failing, to demonstrate moving it upwards.

Because he was only a 2D Figure, even though he knew that the Third Dimension existed, he still couldn't move in that direction without the help of a Higher Dimensional Being.

His confused attempts to move the toy in a direction that didn't exist let his grandson claim that his grandfather was clearly just trying to play some joke on him, and before the narrator could argue that he was serious, his grandson had leapt to his feet, unlocked the door, and ran out of the room.

So the narrator's first attempt to teach someone else about the Third Dimension had been an absolute failure. It convinced him not to try teaching anyone else in his household the secret, and that he couldn't simply rely on the catchphrase of "Upwards, not Northwards". He had to figure out a different way to convince people.

So he decided to try writing.

He spent the next several months writing a detailed description of the Third Dimension, but in an attempt to avoid obviously breaking the law, instead of calling it a physical dimension, he called it "Thoughtland", a hypothetical place where one could, in theory, look down and see inside all things in the world, and where, in theory,

you could meet a creature who had squares for its sides, with eight terminal points. A cube.

It was difficult for him to write this book, because no diagram that he could draw could properly convey the meaning he wanted it to, because the only thing that could be drawn were lines, in books made of lines.

He spent these months depressed over the thought that everything he could see now was only a tiny fraction of what the world really was. He neglected his job as a lawyer, and could hardly stop himself from constantly comparing Flatland to Spaceland every time he spoke.

And every day that passed he found it more and more difficult to accurately and confidently remember the exact shape of a Cube.

If he couldn't even convince his grandson, how could he convince anyone else?

He was already becoming known for skirting the edges of blasphemy, though he hadn't done anything blatant enough to deserve being arrested.

And then one day, eleven months after he'd visited Spaceland, he finally made his last mistake.

It was at a meeting for mathematicians, and another member had just read an essay about how Providence had declared that Two Dimensions were all that could ever exist in the world.

And the narrator could not stop himself from immediately launching into his entire story from start to finish of how the Sphere had appeared and brought him to Spaceland, and beyond.

At first he tried to pretend that it was just a fictional story, but he couldn't keep up the lie for long, and by the time he was done it was clear to everyone that he truly believed everything that he'd just said.

He ended with a rousing speech asking all of his witnesses to stop listening to the lies, and commit themselves to the truth of the Third Dimension.

He was obviously immediately arrested, and brought to the council of Circles for judgement.

He was allowed to repeat his story for them all from start to finish.



He noticed before he'd even started that the Chief Circle saw that higher-class Isosceles guards were in the room, and had them replaced with the thinnest Isosceles available.

The narrator knew what this meant: the Chief Circle intended to kill everyone in the room to prevent his story from being known, and there was no point in wasting better guards.

When the narrator was done telling his story, the Chief Circle asked him two questions:

- 1: Could he demonstrate the direction of "Upward, not Northward"?
- 2: Could he show them through a diagram what a "Cube" was supposed to look like?

The narrator said that he couldn't do either. He couldn't do anything to prove that he was telling the truth. He would just have to rely on the truth to reveal itself someday.

The Chief Circle responded that if that ever happened, then he would be released from prison. But until that day, he would be kept in a jail cell, and maybe if he behaved, he could be allowed to visit with his brother every now and then.

Seven years passed, and the narrator was still a prisoner. The truth of the Third Dimension had not seen fit to reveal itself to the rest of Flatland.

He has never been able to convince anyone that the Third Dimension is real, not even his brother, who he is allowed to visit once a week, who saw and heard the Sphere for himself so long ago on New Year's Eve.

The only hope the narrator had left was that his book, the summary of which you are reading right now, might somehow, someday, help another generation of people break out of the cage their mind is in and allow themselves to imagine more than what they can see in front of them.

He spends most of his time depressed and anxious. Aside from his once a week visits with his brother, he spends every day and night completely alone in his jail cell.

He is no longer sure he remembers what a Cube really looks like, and in his darkest moments, he can't even be sure that the world of Two Dimensions around him is real, or just the figment of some terrible nightmare. He is slowly losing his grasp on reality as a result of the solitary confinement.

Yes, the book does end on the most depressing note possible.

This is the end of the summary of Flatland. I hope you enjoyed it.